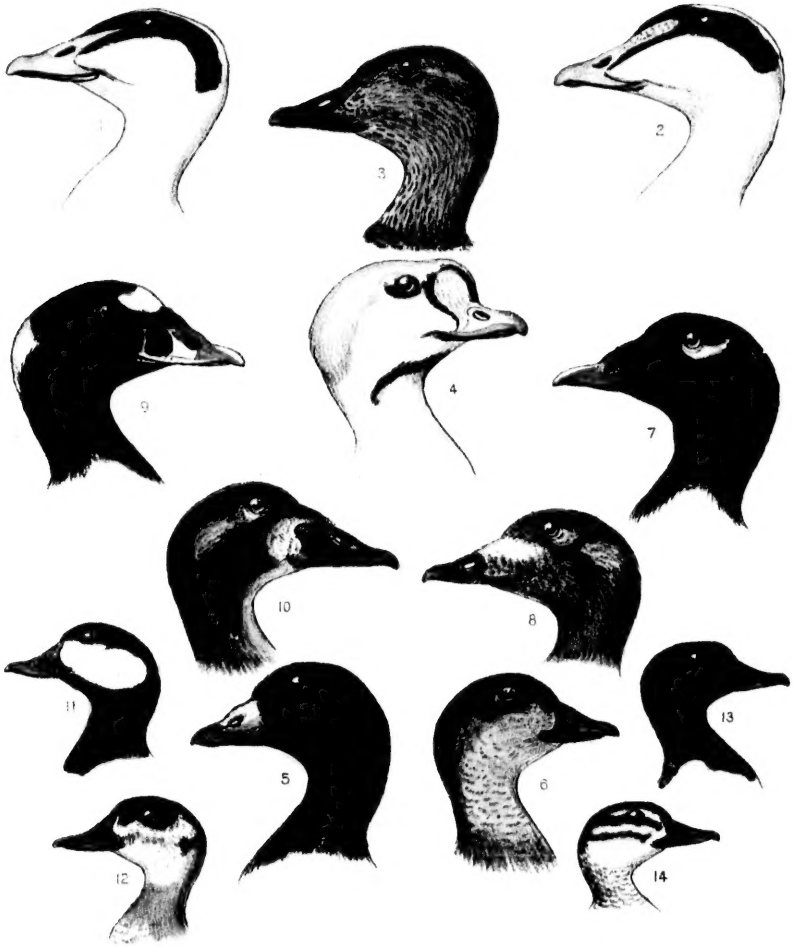
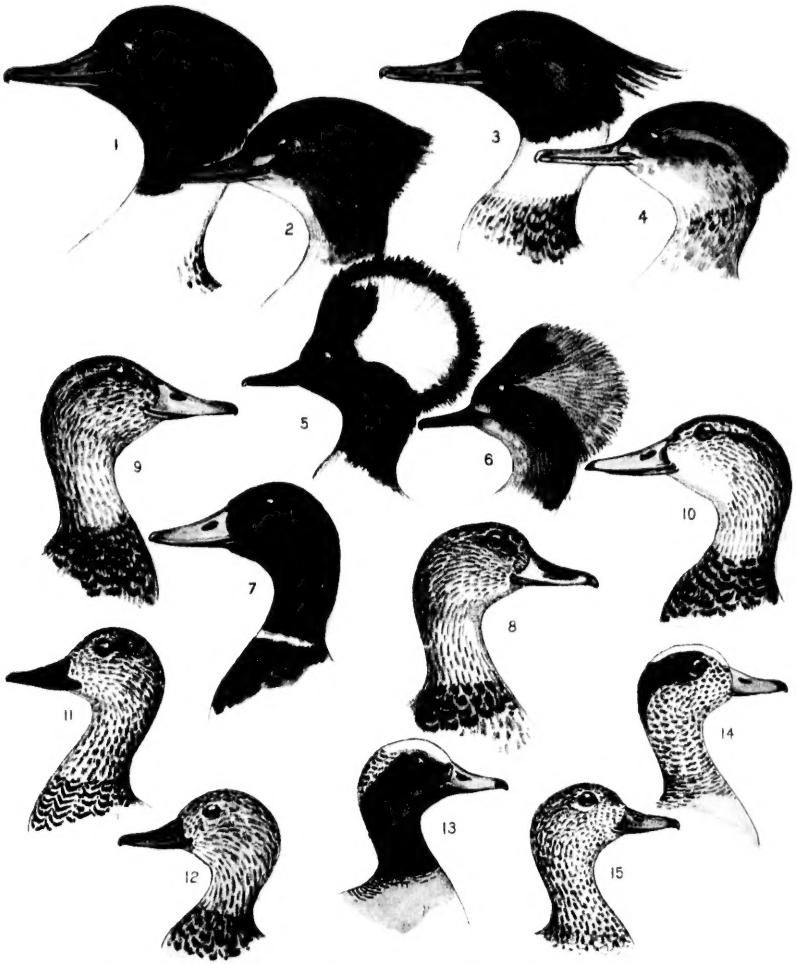
A CHANCE FOR A DOUBLE

1. GREEN-WINGED TEAL. MALE.
2. GREEN-WINGED TEAL. FEMALE.
3. BLUE-WINGED TEAL. MALE.
4. BLUE-WINGED TEAL. FEMALE.
5. CINNAMON TEAL.
6. SHOVELLER DUCK. MALE.
7. SHOVELLER DUCK. FEMALE.
8. PINTAIL DUCK. MALE.
9. PINTAIL DUCK. FEMALE.
10. WOOD DUCK. MALE.
11. WOOD DUCK. FEMALE.
12. REDHEAD DUCK. MALE.
13. REDHEAD DUCK. FEMALE.
14. CANVAS-BACK DUCK. MALE.
15. CANVAS-BACK DUCK. FEMALE.

1. AMERICAN SCAUP DUCK. MALE.
2. AMERICAN SCAUP DUCK. FEMALE.
3. LESSER SCAUP DUCK.
4. RING-NECKED DUCK. MALE.
5. RING-NECKED DUCK. FEMALE.
6. AMERICAN GOLDEN-EYE DUCK. MALE.
7. AMERICAN GOLDEN-EYE DUCK. FEMALE.
8. BARROW'S GOLDEN-EYE DUCK.
9. BUFFLE-HEAD DUCK. MALE.
10. BUFFLE-HEAD DUCK. FEMALE.
11. OLD-SQUAW. MALE.
12. OLD-SQUAW. FEMALE.
13. HARLEQUIN DUCK. MALE.
14. HARLEQUIN DUCK. FEMALE.
15. STELLER'S DUCK.



1. NORTHERN EIDER DUCK.
2. AMERICAN EIDER DUCK. MALE.
3. AMERICAN EIDER DUCK. FEMALE.
4. KING EIDER DUCK.
5. AMERICAN SCOTER DUCK. MALE.
6. AMERICAN SCOTER DUCK. FEMALE.
7. WHITE-WINGED SCOTER DUCK. MALE.
8. WHITE-WINGED SCOTER DUCK. FEMALE.
9. SURF SCOTER DUCK. MALE.
10. SURF SCOTER DUCK. FEMALE.
11. RUDDY DUCK. MALE.
12. RUDDY DUCK. FEMALE.
13. MASKED DUCK. MALE.
14. MASKED DUCK. FEMALE.



1. AMERICAN MERGANSER. MALE.
2. AMERICAN MERGANSER. FEMALE.
3. RED-BREASTED MERGANSER. MALE.
4. RED-BREASTED MERGANSER. FEMALE.
5. HOODED MERGANSER. MALE.
6. HOODED MERGANSER. FEMALE.
7. MALLARD DUCK. MALE.
8. MALLARD DUCK. FEMALE.
9. BLACK DUCK.
10. FLORIDA DUCK.
11. GADWALL. MALE.
12. GADWALL. FEMALE.
13. EUROPEAN WIDGEON.
14. AMERICAN WIDGEON. MALE.
15. AMERICAN WIDGEON. FEMALE.

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HOW TO KNOW

THE

DUCKS, GEESE AND SWANS

OF

NORTH AMERICA

ALL THE SPECIES BEING GROUPED ACCORDING TO SIZE AND COLOR

BY

CHARLES B. CORY

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BOSTON

1897

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PREFACE.

The present work is intended to meet the wants of a large number of persons, especially sportsmen, who are interested in birds and would like to know their names, but often find it no easy task to identify them by the "bird books." To all such I offer this Key, in which the species are arranged in groups according to size, and believe it will enable any one unfamiliar with birds to identify with comparative ease any species of our North American *Anatidæ*.

Birds vary so much in size that the *length* of any one specimen cannot be accepted as a standard for others of the same species. The length measure is, nevertheless, of value to enable us to form an approximate idea of the size of the bird. The length of the *wing* is, however, much less variable, and is an important aid to the identification of many species. In fact, the variation is so small and constant that, allowing for possible extremes, they may be arranged in groups according to length of wing. The identification of any species then becomes a very simple matter, as usually the birds contained in each group are so few in number that characteristic differences in each species are easily indicated.

Let us assume, for example, we have before us a bird which we wish to identify. We first measure the wing (see directions for measurements, illustrated, page 7), and we find the wing measures 5.90 inches long. We now turn to the "Index to Key," and find that Group I. contains birds having the wing measuring from 5.50 to 6.50 inches long. Turning to Group I., we find it contains two sections; Section 1 comprising ducks having a hind toe without flap or lobe,* and Section 2 comprising ducks having a flap on the hind toe. As our duck has a flap on its hind toe, it evidently belongs to this section. We find Section 2 divided in two parts; Part 1 with tail feathers

* Many of the *Anatinæ* or River Ducks have a slightly flattened hind toe approaching a *small* flap, but it is never large enough to confound them with the *Fuligulinæ* or Sea Ducks, which have a LARGE WELL DEVELOPED lobe-like flap on the hind toe.

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not stiff and pointed, and Part 2, tail feathers stiff and pointed. Our duck has stiff, pointed tail feathers, and therefore belongs in Part 2. Part 2 contains two species; one having front of head and cheeks *black*, the other with sides of head more or less *white*. As our duck has a patch of white on the side of the head, it must therefore be the Ruddy Duck, *Erismatura rubida*.

All measurements of birds are given in inches and fractions of an inch. The diagrams on page 7 will illustrate how a bird should be measured, and the chart (page 9) will be useful to the young student of ornithology who may not be familiar with the technical terms used in describing birds. Such terms as primaries and axillars should be learned at once. It is customary to indicate the sexes by the signs of Mars and Venus; the male, of course, being given that of Mars, ♂, and the female, Venus, ♀.

In preparing the Key, a large number of birds were examined and measured. In this connection, my thanks are due to Dr. J. A. Allen, of the American Museum of Natural History; and to Mr. Robert Ridgway, of the Smithsonian Institute, for the loan of many specimens for examination; and especially to Mr. William Brewster, for free access to his magnificent collection in Cambridge.

The illustrations are the work of Mr. Edward Knobel.

CHARLES B. CORY.

BOSTON, MASS., Sept. 1, 1897.

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HOW TO MEASURE A BIRD.

Wing. — Distance from carpal joint C (bend of wing) to the tip of the longest primary D. See cut on page 7.

Length. — Distance in a straight line from the end of the bill to the tip of the longest tail feather. (Occasionally the middle feathers are much elongated, as in the Old Squaw and Pintail Duck, and in other families of birds, such as Phaethon and Stercorarius. In such cases it is well to give the length from bill to longest tail feather, and also to end of outer tail feather.)

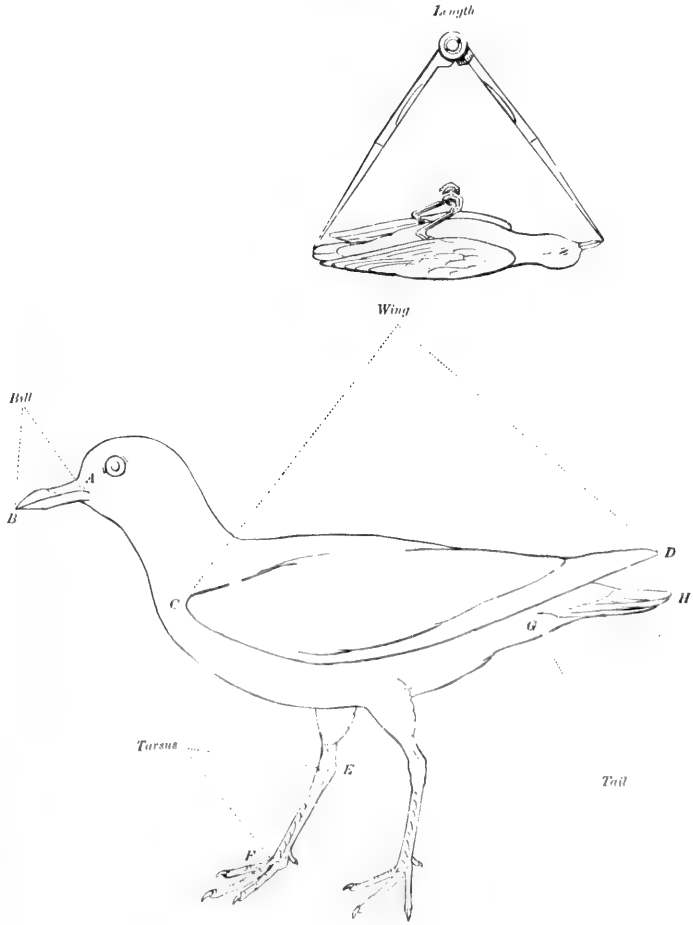
Tail. — Distance from the tip of the longest tail feather to its base (the point where it enters the body).

Bill. — The distance in a straight line from where the bill (upper mandible) joins the skin of the forehead (A) to the tip (B). (There are a few exceptions to this rule, in other families, such as birds with frontal plate, etc. Some curved bills are measured along the curve of the culmen, and at times it is advisable to measure from the nostril to the tip of the bill, but in such cases it should always be so stated.)

Tarsus. — Distance in *front* of the leg from what *appears* to be the knee joint (end of tibia) to the root of the middle toe. All measurements are given in inches and fractions of an inch.

Birds vary so much in size that the length of any one specimen cannot be accepted as a standard for others of the same species. The length measure is, nevertheless, of value to enable us to form an approximate idea of the size of the bird. The length of the wing is much less variable, and is an important aid to the identification of certain species.

HOW TO MEASURE A BIRD.



GLOSSARY.

Nearly all the terms used in describing a bird may be more easily and clearly understood by examining the accompanying figure than from a written description; a few, however, may, perhaps, require a word of explanation.

Mandibles. — Some authors use the word *maxilla* for the upper half of the bill, and the *mandible* for the lower. I prefer, however, to describe the two halves of the bill as the *upper* and *lower mandible*.

Culmen. — The ridge of the upper mandible.

Gonys. — Lower outline (middle) of the under mandible.

Unguis. — The nail on the end of the upper mandible; very pronounced in several families of water birds, — Ducks, Pelicans, and Petrels.

Axillars or Axillary Plumes. — Several elongated feathers at the junction of the wing and body. (Lat. *axilla*, the arm-pit.)

Speculum. — A wing band or patch (usually of a different color from the rest of the wing), formed by the terminal portion of the secondaries; very noticeable in the Ducks.

Tarsus. — Extends from the root of the toes to the end of the *tibia* (what appears to be the bend of the leg or knee; but which is, in reality, the heel joint).

Superciliary Stripe. — Stripe over the eye.

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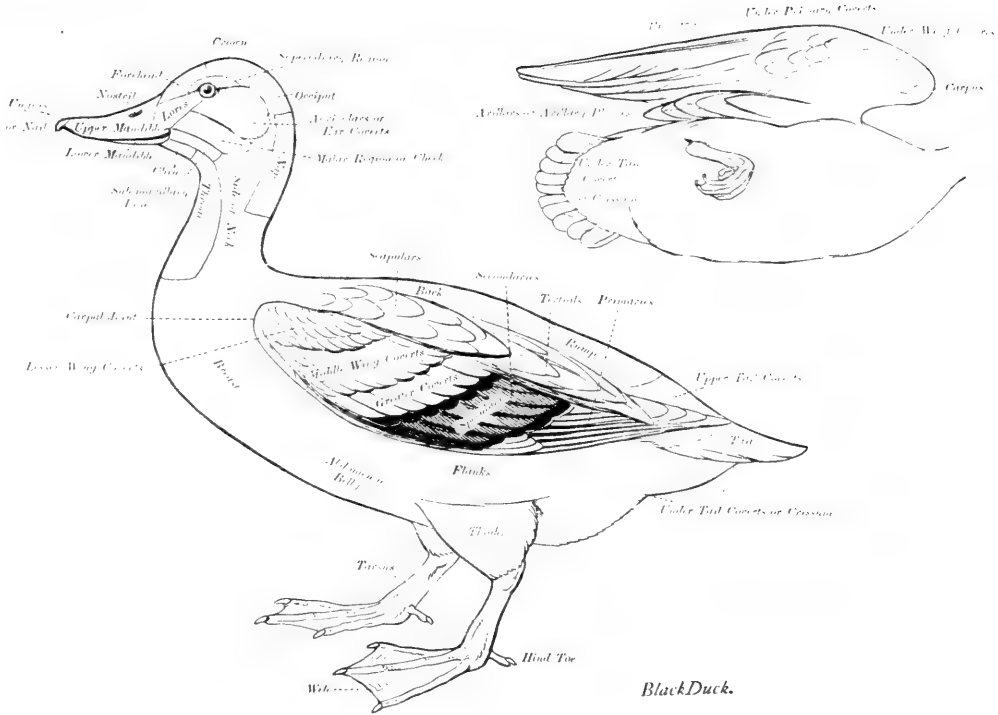

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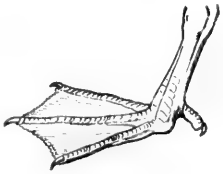

Section 3. Hind toe, **without** membraneous lobe or flap; belly, not white 22

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Section 4. Hind toe, with well-defined membraneous lobe or flap; belly, white, sometimes tinged on lower part with dusky or gray; head, marked with more or less white or brownish white 23

Section 5. Hind toe, with well-defined membraneous lobe or flap; belly, white, sometimes tinged on lower part with dusky or gray; no white or grayish white on head . 24

Section 6. Hind toe, with well-defined membraneous lobe or flap; belly, not white; head, marked with more or less white or grayish white 25

Section 7. Hind toe, with well-defined membraneous lobe or flap; belly, not white; no white on head 26

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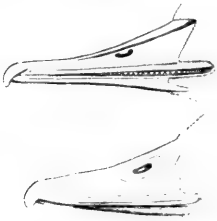

Section 1. Bill, narrow, with tooth-like serrations . 26

Section 2. Bill, not narrow; hind toe, without membraneous lobe or flap; belly, white, sometimes faintly tinged with dusky or gray on lower part . 26

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Section 1. Head and neck, black or blackish, usually marked with more or less white 33

Section 2. Head, white, sometimes tinged with brownish orange. 34

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Group 8. Birds having wings over 19 inches long 36

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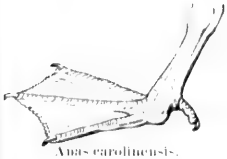
KEY TO THE SPECIES.

GROUP I.

Birds having wings from 5 to 6.50 inches long *

Section 1. Hind toe without flap or lobe.



Anas carolinensis.

Head and neck, chestnut, a patch of green behind the eye; **speculum, black** (male); head and neck, not chestnut (female).

Green-winged Teal.
Anas carolinensis.
See page 47.

Section 2. Hind toe with well defined membraneous lobe or flap.

Part 1. Tail feathers, not stiff and pointed.

Charitonetta albeola.

Head, greenish purple, with white patch (male); head, grayish brown with white patch (female or immature); no dark stripes on cheek; bill less than three fourths inch wide.

Buffle-head Duck.
Dipper Duck.
Charitonetta albeola.
See page 61.

Part 2. Tail feathers, stiff and pointed.

Throat, whitish; cheeks, white or whitish; bill, broad, ¼ inch or more wide.

Ruddy Duck.
Erismatura rubida.
See page 78.

Front of head, including cheeks, black (adult); head with black stripes on side (female or immature).

Masked Duck.
Nomonyx dominicus.
See page 79.

* Directions for wing measurement given on page 6.

GROUP II.

Birds having wings from 6.50 to 7.50 inches long.

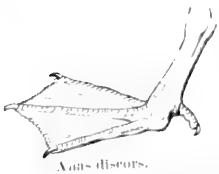
Section 1. Bill narrow with tooth-like serrations; crown with more or less of a crest.

Lophodytes cucullatus (male).

Crest, partly white (male); no white on crest (female).

Hooded Merganser.
Lophodytes cucullatus.
See page 39.

Section 2. Bill not narrow; hind toe without flap or lobe.



Anas discors.

Large patch pale blue on wing (coverts); **white crescent on face** (male); no white crescent, face speckled; **chin whitish** (female). Common in Eastern United States.

Blue-winged Teal.
Anas discors.
See page 48.

Large patch of pale blue on wing (coverts); head and breast, rufous brown; crown, blackish (male); **sides of head, speckled** (dull white dotted with black); **chin and throat, dusky, tinted with rufous** (female). Western species rare east of the Mississippi River.

Cinnamon Teal.
Anas cyanoptera.
See page 49.

No blue patch on wing; head, rufous brown with large patch of green through eye to nape; speculum, black and green (male); head, speckled. No blue patch on wing (female).

Green-winged Teal.
Anas carolinensis.
See page 47.

Section 3. Hind toe with well defined membraneous lobe or flap; belly, white.

Aythya affinis.

Head, greenish purple, no white on head; back, barred black and white; **speculum, white.**

Lesser Scaup Duck, Blue-bill.
Aythya affinis (*male*).
See page 57.

Head, brownish; a patch of dull white at base of bill; no white on ear coverts; **speculum, white.**

Lesser Scaup Duck, Blue-bill.
Aythya affinis (*female*).
See page 57.

Head, greenish purple; no white on head; back, dull black; **speculum, gray.**

Ring-neck Duck.
Aythya collaris (*male*).
See page 58.

Head, dull brown; brownish white at base of bill and below eye; **speculum, gray.**

Ring-neck Duck.
Aythya collaris (*female*).
See page 58.

Head, greenish purple; a large patch of white on back of head.

Buffle Headed Duck.
Charitonetta albeola (*male*).
See page 61.

Head, dark brown or dusky, a **patch of white behind the eye** (on ear coverts); no white or brownish white at base of bill; **speculum, white.**

Buffle Headed Duck.
Charitonetta albeola (*female*).
See page 61.

Section 4. Hind toe with well defined membraneous lobe or flap; belly, not white.

Plumage variously marked with white, slate color and chestnut.

Harlequin Duck.
Histrionicus histrionicus (*male*).
See page 66.

General plumage dull brown, mottled on the under parts.

Harlequin Duck.
Histrionicus histrionicus (*female*).
See page 66.

Head, mostly white, greenish on lores and occiput. **Stellers' Duck.** *Enicometta stelleri (male).* See page 73.

Head, light brown; belly, clear, sooty brown. **Stellers' Duck.** *Enicometta stelleri (female).* See page 73.

GROUP III.

Birds having wings from 7.50 to 8.50 inches long.

Section 1. Bill narrow with tooth-like serrations.

Lophodytes cucullatus.

Head, brownish or grayish, tarsus less than 1.50; crest small (female and immature). **Hooded Merganser.** *Lophodytes cucullatus.* See page 39.

Head with black and white crest; tarsus, less than 1.50 (male). **Hooded Merganser.** *Lophodytes cucullatus.* See page 39.

Section 2. Bill not narrow, hind toe without membraneous lobe or flap; a patch of pale blue on shoulder.

Anas discors.

A patch of blue on wing (coverts); a **white crescent on face;** speculum, green. **Blue-winged Teal.** *Anas discors (male).* See page 48.

No white crescent on face; head, speckled; chin, whitish; speculum, green. **Blue-winged Teal.** *Anas discors (female).* See page 48.

Head and neck, rufous brown; crown, blackish; speculum, green. Western species, rare east of the Mississippi River.

Cinnamon Teal.
Anas cyanoptera (*male*).
See page 49.

Head, not rufous: **sides of head, speckled; chin and throat, dusky, tinged with rufous;** belly, with distinct spots; speculum, green. Western species rare east of the Mississippi River.

Cinnamon Teal.
Anas cyanoptera (*female*).
See page 49.

Section 3. Hind toe without membraneous lobe or flap; no blue on wing.

Dendrocygna fulva.

Head, yellowish brown with black lines on nape; no green speculum; rump and tail, black; belly, tawny brown.

Fulvous Tree-Duck.
Dendrocygna fulva.
See page 90.

Section 4. Hind toe with well defined membraneous lobe or flap; head marked with more or less white or brownish white; belly, white, sometimes tinged with dusky or gray on lower part.

Aythya marila nearctica

Head, brownish; a patch of dull white on face at base of bill: **speculum, white.**

Greater Scaup Duck, Blue Bill.
Aythya marila nearctica.
See page 56.

Speculum, *white*, similar to preceding but somewhat smaller. More common in the South than the Greater Scaup Duck.

Lesser Scaup Duck.
Aythya affinis (*female*).
See page 57.

Speculum, gray; head and neck, brownish; chin and anterior portion of lores, brownish white or whitish; resembles female: Red-head, but is smaller.

Ring-necked Duck.
Aythya collaris (*female*).
See page 58.

A patch of white or grayish white on the head, including the eye; no speculum; under tail coverts, white; adult males have the tail feathers long and pointed.

Old Squaw. Long-tailed Duck.
Clangula hyemalis.
See page 64.

Section 5. Hind toe with well defined membraneous lobe or flap; belly, white, sometimes tinged on lower part with dusky or gray; no white or grayish white on head.

Glaucionetta clangula americana.

Head, brown.

Glaucionetta clangula americana (female).
See page 59.

Head, black, glossed with green; speculum, white; back, grayish white finely lined with black.

Greater Scaup Duck.
Blue-bill or Black Head.
Aythya marila nearctica (male).
See page 56.

Head, black, glossed with purple, finely lined with black; **speculum, white;** back, grayish white, smaller than the preceding species, but resembles it closely.

Lesser Scaup Duck.
Blue-bill or Black-head.
Aythya affinis (male).
See page 57.

Head, black, with violet or bluish gloss, a spot of white on the chin; **speculum, gray;** back, dull black.

Ring-necked Duck.
Aythya collaris (male).
See page 58.

Section 6. Hind toe with well defined membraneous lobe or flap; belly, not white.

Plumage, variously marked with white, slate-color and chestnut; speculum, bluish; top of head and wing coverts, not white.

Harlequin Duck.
Histrionicus histrionicus (male).
See page 66.

Top of head and wing coverts, not white; plumage, dull brown, mottled on the underparts.

Harlequin Duck.
Histrionicus histrionicus (female).
See page 66.

Top of head, white; wing coverts, white; rump, bluish black.

Stellers' Duck.
Eniconetta stelleri.
See page 73.

GROUP IV.

Birds having wings from 8.50 to 10 inches long.*

Section 1. Bill narrow, with tooth-like serrations.

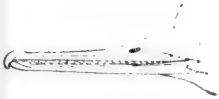
Distance from nostril to tip of bill, **less than 1.50**; head and neck, **greenish black**; underparts, creamy white, tinged with salmon color; feet, red.

American merganser.
Sheldrake.
Merganser americana (male).
See page 37.

Merganser americana.

Distance from nostril to tip of bill, **less than 1.50; head, rufous brown**; upper throat, white; feet, orange red.

American Merganser.
Sheldrake.
Merganser americana (female).
See page 37.



Merganser serrator.

Distance from nostril to tip of bill, **more than 1.50; head, black tinged with green**; breast, rufous streaked with black.

Red-breasted Merganser.
Merganser serrator (male).
See page 38.

Distance from nostril to tip of bill, more than 1.50; head, brownish, paler on the throat; speculum, white.

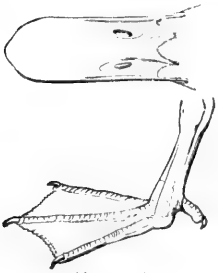
Red-breasted Merganser.
Merganser serrator (female).
See page 38.

* For directions for measurements, see page 6.

Section 2. Bill not narrow; hind toe without membraneous lobe or flap; belly, white.

Head, green, purple, black and white; chin and upper throat, white; feet, yellow in life.

Wood Duck.
Summer Duck.
Aix sponsa (male).
See page 52.



Aix sponsa.

Head, grayish brown with white stripe through the eye; chin and upper throat, white; feet, yellow in life.

Wood Duck.
Summer Duck.
Aix sponsa (female).
See page 52.

Head, brown; chin, not white; a white stripe on sides of the neck; tail, pointed.

Pintail Duck.
Dafila acuta (male).
See page 51.

Section 3. Hind toe without membraneous lobe or flap; belly, not white.

Spatula clypeata.

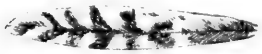
Bill, more than one inch wide near tip; **Head, green or greenish; speculum, metallic green; axillars, white;** feet, orange red in life.

Shoveller Duck.
Broad-bill.
Spatula clypeata (male).
See page 50.

Bill, more than one inch wide near tip; **head, narrowly streaked and speckled with brown** and dull white; **speculum, metallic green;** feet, *orange red* in life; axillars, white.

Shoveller Duck.
Broad-bill.
Spatula clypeata (female).
See page 50.

Bill, less than one inch wide near tip; **head, lined** and **speckled with brown** and brownish white; speculum, *not metallic green*; **axillars, white, barred with brown**; rump and tail coverts, brown, narrowly edged and banded with white; feet, dusky. **Pintail Duck.**



Axillars.
Dafila acuta.

Dafila acuta (female).
See page 51.

Head, yellowish brown with black or brown line on nape; **no white speculum** or white on wing; rump and tail, black; **belly, tawny brown**; lower belly, not black; axillars, **smoky black.** **Fulvous Tree Duck.**

Dendrocygna fulva.
See page 90.

Head, rufus brown, with black line on nape; more or less white on wing; speculum, whitish; breast, brown; **lower belly, black**; **axillars, black.**

Black-bellied Tree Duck.
Dendrocygna autumnalis.
See page 89.

Belly, white, **with more or less brown spots**; **axillars, white**; bill, less than .90 wide at widest part. **Gadwall.**

Anas strepera (female).
See page 44.

Section 4. Hind toe with well defined membraneous lobe or flap; belly, white, sometimes tinged on lower part with dusky or gray; head marked with more or less white or brownish white.

Head, brownish; a patch of dull white on face at base of bill; speculum, white.

Aythya marila nearctica.

Greater Scaup Duck.
Blue-bill, Black-head.
Aythya marila nearctica (female).
See page 56.

Head and neck, dark glossy green; a nearly round patch of white on cheek at base of bill; back, black; speculum, white. **American Golden Eye.**
Whistler.

Glaucionetta clangula americana (male).
See page 59.

Head, bluish black, or purplish blue; an irregular white patch on cheek at base of bill. **Barrow's Golden Eye.**

Glaucionetta islandica (male).
See page 60.

Top of head, brown; sides of head, brownish white; speculum, gray; bill, more than one and a quarter inches long.

Red-head Duck.
Aythya americana (*female*).
See page 53.

Bill, not over 1.25 long; **a patch of white or grayish white, on the head, including the eye;** no speculum; under tail covert, white; adult males have the tail feathers long and pointed.

Old Squaw.
Long-tailed Duck.
Clangula hyemalis.
See page 64.

Section 5. Hind toe with well defined membraneous lobe or flap; belly, white, sometimes tinged on lower part with dusky or gray; no white or grayish white on head.

Aythya marila nearctica.

Head, black, glossed with green; back, grayish white, finely lined with black; **speculum, white.**

Greater Scaup Duck.
Blue-bill, Black-head.
Aythya marila nearctica (*male*).
See page 56.

Head, cinnamon brown; upper breast and back, ashy gray, not barred; speculum, white. Very similar to female Barrow's Golden Eye, but slightly smaller, much more common than the next species on the Atlantic coast.

American Golden Eye.
Whistler.
Glaucionetta clangula americana (*female*).
See page 59.

Head, cinnamon brown; upper breast and back, ashy gray not barred; speculum, white, very similar to preceding species, but slightly larger.

Barrow's Golden Eye.
Glaucionetta islandica (*female*).
See page 60.

Head, rufous brown; crown, blackish; **breast, black;** lower back, ashy white, finely lined with black; bill very different from that of Red-head. See cut.

Canvas-back Duck.
Aythya vallisneria (*male*).
See page 54.

Aythya vallisneria.

Head, neck, and upper breast, dull cinnamon brown, paler on throat; lower back, dull brown, barred with fine, wavy, white lines; easily distinguished by shape of bill. See cut.

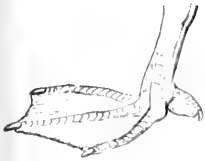
Canvas-back Duck.
Aythya vallisneria (female).
See page 54.

Aythya americana.

Head, reddish brown; crown, not blackish; breast, black; lower back, grayish, finely lined with black; bill very different from that of Canvas-back. See cut.

Red-headed Duck.
Aythya americana (male).
See page 53.

Section 6. Hind toe with well defined membraneous lobe or flap; belly, not white; more or less white or grayish white on head.



General plumage, black; a patch of white on front of crown and nape; bill, large, marked with orange, red, black, and white; no white on wings.

Surf Scoter.
Skunk Head Coot.
Oidemia perspicillata (male).
See page 77.

General plumage, brown; top of head and wings, dark; a spot of dull white at base of bill and behind eye; no white on wings.

Surf Scoter.
Skunk-head Coot.
Oidemia perspicillata (female).
See page 77.

Top and sides of head, white; a patch of greenish in front of eye; throat, black; all **wing coverts, white**.

Stellers' Duck.
Stellers' Eider.
Eniconetta stelleri (male).
See page 73.

A large, silvery white patch enclosing the eye, narrowly bordered with black; rest of head, pale olive or grayish olive; throat, white.

Spectacled Eider.
Arctonetta fisheri (male).
See page 72.

Section 7. Hind toe, with well defined membraneous lobe or flap; belly, not white; no white on head.

Under parts, pale brown, faintly and irregularly barred with darker brown; axillars, ashy white, the shafts often faintly tinged with brownish.

Spectacled Eider.
Arctonetta fischeri (*female*).
See page 72.

GROUP V.

Birds having wings from 10 to 12 inches long.*

Section 1. Bill, narrow, with tooth-like serrations.

Side of bill.

Head and neck, greenish black; under parts, cream white, tinged with salmon color; feet, red.

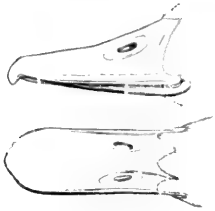
American merganser.
Sheldrake.
Merganser americana (*male*).
See page 37.

Top of bill.
Merganser americana.

Head, rufous brown; upper throat, white; feet, orange red.

American merganser.
Sheldrake.
Merganser americana (*female*).
See page 37.

Section 2. Bill, not narrow; hind toe, without membraneous lobe or flap; belly, white, sometimes faintly tinged with dusky or gray on lower part.



Axillars, white; the shafts, white; exposed speculum, black and white; **head, tawny brown; cheeks and throat, tawny, speckled with brown.**

Gadwall.
Creek Duck.
Anas strepera (*male*).
See page 44.

* For directions, etc., see page 6.

Axillars, white; the shafts, white; head, speckled; exposed speculum, black and white.

Gadwall.
Creek Duck.
Anas strepera (female).
See page 44.

Axillars, white, with dark shafts; speculum, green and black; white patch on shoulder; **top of head, white.**

American widgeon.
Baldpate.
Anas americana (male).
See page 45.

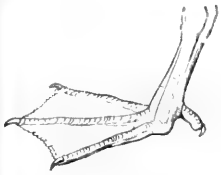
Axillars, white with dark shafts; no white shoulder patch; **head, speckled.**

American Widgeon.
Baldpate.
Anas americana (female).
See page 45.

Axillars, grayish white; head, brown, not speckled; stripe of white on sides of neck; tail pointed; middle feathers long.

Pintail Duck.
Dafila acuta (male).
See page 51.

Section 3. Hind toe, without membraneous lobe or flap; belly, not white.



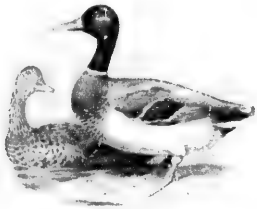
Anas boschas.

Speculum, bluish purple edged with white; head, green; a white ring around neck; breast, chestnut; belly, grayish white; feet, orange red; axillars, white.

Mallard Duck.
Anas boschas (male).
See page 41.

Belly, white, showing more or less brown spots; **axillars, white;** bill, less than .90 wide at widest part; speculum, black and white.

Gadwall.
Anas strepera (female).
See page 44.



Anas boschas.

Speculum, bluish purple, edged with white and black; head, tawny brown, streaked with dark brown; belly, pale buff, mottled with brown; feet, orange red; axillars, white.

Mallard Duck.
Anas boschas (female).
See page 41.

Speculum, purplish blue, *not edged with white;* head and throat, streaked; throat, not buff, no black spot at base of bill; feet, olive (sometimes red); axillars, white. Eastern North America.

Black Duck.
Dusky Duck.
Anas obscura.
See page 42.

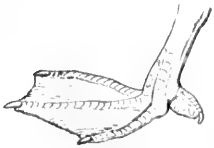
Speculum, purplish blue, not edged with white; head, pale brown; **upper throat, buff, not streaked;** bill, yellowish olive; nail of bill and spot at base, black; feet, pale orange red; axillars, white. Florida species occasionally observed on Gulf coast to Louisiana.

Florida Black Duck.
Florida Dusky Duck.
Anas fulvigula.
See page 43.

Speculum, purplish blue, **not edged with white;** Texas species ranging from Texas north to Kansas.

Mottled Black Duck.
Anas fulvigula maculosa.
See page 43.

Section 4. Hind toe, with well defined membraneous lobe or flap; head with more or less white or grayish white; belly, black.


Oidemia deglandi.

General plumage, black; speculum, white; spot under eye, white; axillars, black; bill, orange at base.

White-winged Scoter.
White-winged Coot.
Oidemia deglandi (*male*).
See page 75.

General plumage, black; head, black, with patch of white on crown and nape; **no white on wing;** axillars, black; bill, orange, black, and white.

Surf Scoter.
Skunk-head Coot.
Oidemia perspicillata (*male*).
See page 77.

Top of head, black, divided on crown; **more or less green on head;** throat, white; axillars, white; bill, culmen, divided and rounded at base. (See cut of bill.)

American Eider Duck.
Somateria dresseri (*male*).
See page 69.

Dresser's Eider Duck.
Somateria dresseri.

Northern Eider Duck.
Somateria borealis.

Top of head, black, divided on crown: **more or less green** on head; throat, white; axillars, white; culmen, divided and pointed at base. (See cut of bill.)

Greenland Eider Duck.
Somateria borealis (*male*).
See page 68.

Top of head, black, divided on crown; more or less green on head; throat, white, **with black, V-shaped mark.** Pacific species does not occur on Atlantic coast.

Pacific Eider Duck.
Somateria v-nigra (*male*).
See page 70.

Top of head, slate color; cheeks, greenish; throat, white, with large, black, **V-shaped mark.**

King Eider Duck.
Somateria spectabilis (*male*).
See page 71.

Section 5. Hind toe with well defined membraneous lobe or flap; no white on head; belly, black.

General plumage, black; axillars, black; no white on wing; bill, orange at base; feathers on bill, more than one-half inch from nostril.

American Scoter.
Black Coot.
Butter-bill Coot.
Oidemia americana (*male*).
See page 74.

Section 6. Hind toe with well defined membraneous lobe or flap; head marked with more or less white, or grayish white; belly, mottled brown, or grayish brown, or slaty.

Oidemia americana.

General plumage, brownish; no white on wing; **feathers on bill, more than one-half inch from nostril** (female and immature).

American Scoter.
Butter-bill Coot.
Oidemia americana (female).
See page 74.

General plumage, grayish brown; speculum, white; feathers on bill, less than one-half inch from nostril (female and immature).

White-winged Scoter.
White-winged Coot.
Oidemia deglandi (female).
See page 75.

General plumage, grayish brown; feathers extending on upper part of bill more than on the sides; no white on wing; **feathers on bill, less than one-half inch from nostril.**

Surf Scoter.
Skunk-head Coot.
Oidemia perspicillata (female).
See page 77.

A large spectacle-like, silvery white patch enclosing the eye, narrowly bordered with black.

Spectacle Eider.
Arctonetta fisheri (male).
See page 72.

Section 7. Hind toe with well defined membraneous lobe or flap; no white on head; belly, mottled brown or grayish brown.

General plumage, brownish; no white on wings; **axillars, black; feathers on the bill, more than one-half inch from nostril.**

American Scoter.
Butter-bill Coot.
Gray Coot.
Oidemia americana (*female*).
See page 74.

Head, dark brown or black; **feathers on bill, less than one-half inch from nostril; axillars, black; no white on wings** (immature male).

Surf Scoter.
Skunk-head Coot.
Oidemia perspicillata (*young male*).
See page 77.

Head, tawny, streaked with brown; **axillars, white or grayish white**; throat, streaked; **feathers on bill, within one-fourth inch from nostril; decided difference in bill** from next species. (See cut. Eastern North America.

American Eider Duck.
Somateria dresseri (*female*).
See page 69.

Head, tawny, streaked with brown; axillars, **white or grayish white**; throat, streaked; feathers on bill within **one-fourth inch from nostril; decided difference in bill** from preceding species. (See cut.) Eastern North America.

Greenland Eider Duck.
Somateria borealis (*female*).
See page 68.

Resembles the preceding species, but occurs in Western North America, Pacific coast, and Great Slave Lake regions; does not occur in Eastern North America. (See cut of bill.)

Pacific Eider Duck.
Somateria V-nigra (*female*).
See page 70.

Head, tawny, streaked with brown; axillars, **white or grayish white**; throat, not streaked; **feathers on bill more than one-fourth inch from nostril.**

King Eider Duck.
Somateria spectabilis (*female*).
See page 71.

GROUP VI.

Birds having wings from 12 to 14 inches long.*

Section 1. Head not black or marked with black.

Head, dark, glossy green; white ring around neck; speculum, **bluish purple, edged with black and white.**

Mallard Duck.
Anas boschas (male).
See page 41.

Head, brownish; general plumage, mottled brown; **speculum, bluish purple edged with black and white.**

Mallard Duck.
Anas Boschas (female).
See page 41.

Head, brownish; general plumage, brown, streaked with buff and dark brown; **speculum, bluish purple not edged with white.**

Black Duck.
Dusky Duck.
Anas obscura.
See page 42.

General plumage, white; head, white, sometimes tinged with brownish orange (adult). **General plumage, grayish** (immature).

Ross's Snow Goose
Chen rossii.
See page 82.

Section 2. Head marked with more or less black, or entirely black.

Head, black, divided on crown; more or less pale green on head; **throat, white, marked with black V;** no speculum. Pacific coast.

Pacific Eider Duck.
Somateria V-nigra (male).
See page 70.

* For directions for wing measurements, see page 6.

Head and neck, black; sides of neck (not front), mottled with white; no speculum; **lower breast, grayish;** no white on head.

Brant.
Branta bernicla.
See page 86.

Head and neck, black; front and sides of neck, mottled with white; no speculum; **lower breast, dark, not pale gray;** no white on head.

Black Brant.
Branta nigricans.
See page 87.

A patch of white on side of head, extending to throat, rest of head and **neck, black.** Western United States, rarely to Wisconsin.

Cackling Goose.
Bernicla canadensis minima.
See page 85.

GROUP VII.

Birds having wings from 14 to 19 inches long.

Section 1. Head and neck, black or blackish, marked with more or less white.

Head and neck, black; a patch of white on each cheek, extending to upper throat; no white on neck.

Canada Goose.
Branta canadensis and races.
See page 85.

Head and neck, black; side (*not front*), **of neck, speckled with white;** upper belly, whitish.

Brant.
Branta bernicla.
See page 86.

Head and neck, black; side and front of neck, speckled with white; upper belly, grayish brown.

Black Brant.
Branta nigricans.
See page 87.

Face and upper breast, white; lores, black; back of head, black.

Barnicle Goose.
Branta leucopsis.
See page 85

Section 2. Head, white, sometimes tinged with brownish orange.

Entire plumage, white; primaries, black. Chiefly Pacific coast to Mississippi Valley, rare on Atlantic coast. Smaller than *C. h. nivalis.* Bill, over 1.90; tarsus, over 2.80; middle toe, over 2.10.

Lesser Snow Goose (adult).
Chen hyperborea.
See page 80.

Entire plumage, white; primaries, black; resembles preceding species but is larger (adult). Eastern North America, south in winter on Atlantic coast to Florida and Cuba.

Greater Snow Goose.
Chen hyperborea nivalis.
See page 81.

Similar to Lesser Snow Goose, but smaller. Bill, 1.50 to 1.75; tarsus, 2.25 to 3; middle toe, 1.80 to 2.05; base of upper mandible often corrugated (adult). Pacific coast east to Montana; does not occur on Atlantic coast.

Ross's Snow Goose.
Chen rossii.
See page 82.

Back, slaty brown; belly and **rump, gray;** the feathers, not barred; terminal half of tail, not white (adult).

Blue Goose.
Chen caerulescens.
See page 81.

Head and nape, white; front of throat, black; general plumage, plumbeous ash; the feathers barred at tip with black and white; terminal half of tail, white (adult). Alaska, usual on Pacific coast to California; not found in Eastern North America.

Emperor Goose.
Philacte canagica.
See page 87.

Section 3. Head, brownish or grayish, sometimes marked with white.

Forehead and feathers at base of bill, white; nail of bill (unguis), whitish; bill, yellowish; breast, grayish, more or less marked or spotted with black.

American White Fronted Goose.
Anser albifrons gambeli (*adult*).
See page 83.

No white on forehead or base of bill; bill, yellowish; **nail of bill (unguis), dusky;** rump, slaty brown; wing coverts, edged with white.

American White Fronted Goose.
Anser albifrons gambeli (*immature*).
See page 83.

General plumage, grayish; rump, white; smaller than *C. h. nivatis;* bill, over 1.90; tarsus, over 2.80; middle toe, over 2.10 (immature). Chiefly Pacific coast to Mississippi Valley, rare on Atlantic coast.

Lesser Snow Goose.
Chen hyperborea (*immature*).
See page 80.

General plumage, grayish; rump, white; larger than either *nivatis* or *rossii*. Eastern North America, south in winter to Florida and Cuba.

Greater Snow Goose.
Chen hyperborea nivatis (*immature*).
See page 81.

General plumage, grayish; rump, white; bill, 1.50 to 1.75; tarsus, 2.25 to 3; middle toe, 1.80 to 2.05. Pacific coast, east to Montana, not found on Atlanite coast.

Ross's Snow Goose.
Chen Rossii (*immature*).
See page 82.

Head, brownish gray; chin, white; rump, gray; unguis (nail or bill), yellow; wing coverts, grayish, showing very little white on the edge of the feathers.

Blue Goose.
Chen caerulescens (*immature*).
See page 81.

Head, plumbeous, speckled with white; general plumage, plumbeous ash; the feathers barred near tip with black and white; **terminal half of tail, white** (immature). Alaska, casual on Pacific coast to California; does not occur in Eastern North America.

Emperor Goose.
Philacte canagica.
See page 87.

GROUP VIII.

Birds having wings over 19 inches long.*

Head and neck, black; a white patch on cheek.

Canada Goose.
Branta canadensis.
See page 84.

General plumage, white; bill, black with yellow spot (adult): distance from tip of bill to nostril, less than distance from nostril to eye (immature birds are gray or brownish gray). Common on some parts of the coast.

Whistling Swan.
Olor columbianus.
See page 91.

Olor columbianus.

General plumage, white; bill, black, showing no yellow; distance from tip of bill to nostril, more than distance from nostril to eye. Chiefly found in the interior of North America, not common on the coast.

Trumpeter Swan.
Olor buccinator.
See page 91.

* Directions for wing measurement, see page 6.

ORDER ANSERES.

LAMELLIROSTRAL SWIMMERS.

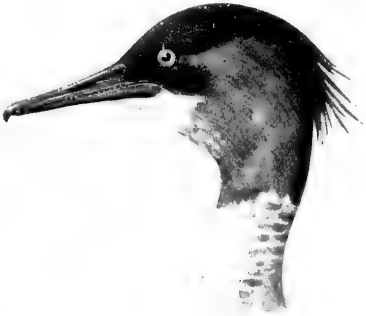
FAMILY ANATIDÆ. DUCKS, GEESE AND SWANS.

SUBFAMILY MERGINAE. MERGANSERS.

Fish-eating Ducks having narrow bills with tooth-like serrations on edges.

GENUS MERGANSER BRISSON.

Merganser americanus (male).



Merganser americanus (female).

MERGANSER AMERICANUS (*Cass*).

American Merganser.

SHELDRAKE. GOOSANDER.

Adult male: Bill, red, long and narrow, with tooth-like serrations; head and neck, greenish black; **under parts, creamy white tinged with salmon color;** tail, gray; feet, red.

Length, 26.50; wing, 11; tarsus, 2; bill, 2.10.

Adult female: Upper throat, white; breast and head, rufous brown; belly, white; speculum, white; feet, orange.

Length, 24.50; wing, 9.75; tarsus, 1.90; bill, 2.

The distance from the nostril to the tip of the bill is less than 1.50 inches in this species, and the female may always be distinguished from the Red-breasted Merganser by this character, as in that species the distance from the nostril to tip of bill is more than 1.50 inches.

The American Merganser, Sheldrake, or Goosander, as it is variously called in different localities, is generally distributed throughout North America, from the Atlantic to the Pacific. It is not uncommon on the Atlantic coast, from Maine to Georgia, and occasionally a few birds wander as far south as Florida. It breeds in the northern United States south to Pennsylvania and Colorado. The nest is a little mat of leaves or grass placed on a ledge, or occasionally in a hole in a tree. The eggs are from seven to ten, of a pale yellow buff color.

MERGANSER SERRATOR (*Linn.*).

Red-breasted Merganser.

SHELDRAKE.

Merganser serrator (male).

Adult male: Head and upper throat, black, tinged with greenish; a white ring around the neck, not always well defined; breast, rufous, streaked with black; lower breast and belly, white; the sides and rump, delicately pencilled black. **Distance from nostril to tip of bill,** more than 1.50.

Length, 23; wing, 9; tarsus, 1.90; bill, 2.30.

Female and young male: Head, brownish; throat, pale buff; back, gray; under parts of the body are white, and speculum is white.

Length, 21; wing, 8.80; tarsus, 1.90; bill, 2.50.

The Red-breasted Merganser is a cosmopolitan species occurring in Europe and Asia, as well as the Western Hemisphere. It occurs throughout North America, ranging in winter southward to the Gulf of Mexico and Cuba, and is a common species on the Atlantic coast, being the well-known "Sheldrake" of gunners. It breeds from Minnesota and Maine, northward; the nest is placed

on the ground, and usually very carefully concealed. The eggs are pale buff color, from eight to twelve in number.

The female of this species may always be distinguished from the American Merganser, or Goosander, by the difference in the distance from the nostril to the tip of the bill.

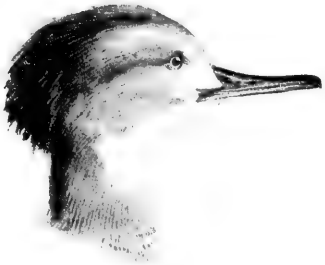
GENUS **LOPHODYTES** REICH.

LOPHODYTES CUCULLATUS (*Linn.*).

Hooded Merganser.

HAIRY CROWN.

(Male.)



Female.

Adult male: **Head with large black and white crest;** upper parts, black; under parts, white, having the sides brownish, delicately barred with black.

Length, 19.50; wing, 7.75; tarsus, 1.30; bill, 1.50.

Adult female: Head and neck, brownish, showing a slight crest, but not nearly as large as in the male; under parts white.

Length, 18.50; wing, 7.75; tarsus, 1.30; bill, 1.50.

The young bird resembles the female, but has no crest.

Length, 18.50; wing, 7.70; tarsus, 1.25; bill, 1.50.

The Hooded Merganser is found in many parts of North America, from the Atlantic to the Pacific. It is common in Florida in winter, and in many of the Gulf States to Mexico and Cuba, breeding throughout its range. The eggs are usually deposited in a hollow tree, near the water; they are white, sometimes buffy white, in color, and number from seven to ten. The note somewhat resembles that of the Scaup Duck, but is sharper.

DUCK SHOOTING FROM A "BLIND"

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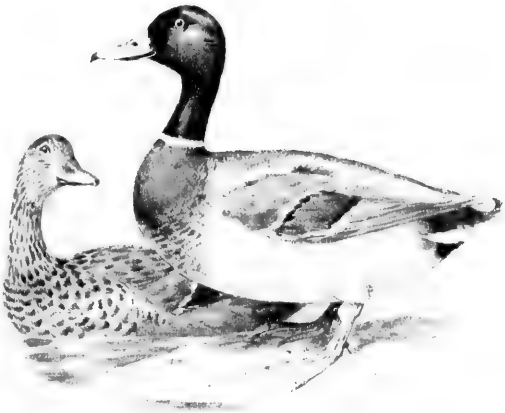
DUCK SHOOTING FROM A "BLIND"

SUBFAMILY ANATINÆ. RIVER DUCKS.

Ducks having hind toe without membraneous lobe or flap.

GENUS ANAS LINN.



(Female.) (Male.

ANAS BOSCHAS *Linn.*

Mallard.

GREEN HEAD, ENGLISH DUCK.

Adult male: Head and neck, dark green with a white ring on the neck; under parts, whitish or ashy white; breast, rich chestnut brown; under tail coverts, black; upper tail coverts are also black with central feathers elongated and curved upwards; **speculum, purple, bordered with black and white;** feet, orange red; bill, yellowish olive.

Adult female: Speculum, purple bordered with black and white; head, brownish buff; belly, buffy brown, usually mottled; feet, orange red.

Length, 23; wing, 10.50; bill, 2.20.

The Mallard Duck occurs commonly throughout the northern part of the Northern Hemisphere. It breeds far northward, ranging in winter to the West Indies and Central America. The eggs are greenish white, from seven to ten in number. The nest is usually placed on the ground, and is composed of grass lined with down.

The Mallard is known to cross with various species, some sixty or seventy hybrids having been recorded; the most common crosses being with the Pintail, Black Duck and Widgeon. The female may always be distinguished from the Black Duck by the broad white border of the speculum.

The male says, "Drake, drake, drake, drake," several times, in a husky voice, and also "Shwipe," low and husky, like the Black Duck. The female "quacks." Drakes rarely "quack." In most species it is usually the female.

ANAS OBSCURA *Gmel.*

Black Duck. Dusky Duck.

Head and neck, pale brown, finely dotted and streaked with dark brown; top of the head darker than the cheeks; general plumage, dark brown; feathers, edged with pale buff; **speculum, purple, edged with black**; bill, yellowish green, with dark nail, no black at the base; feet, orange red, with dusky webs; the color of the feet varies.

Length, 21; wing, 10.75; bill, 2.10; tarsus, 1.75.

It is not improbable that there are two well-marked races of this species, one being larger and heavier, frequenting salt water bays and lagoons, and having the legs and feet orange red; and the other, a somewhat smaller bird, having the legs and feet olive, and usually found about fresh-water lakes and ponds. Some of the Maine gunners recognize this difference, and call the larger bird the Hudson's Bay Duck. The Black Duck ranges throughout eastern North America, from Illinois to the Atlantic coast, and from Labrador and Hudson's Bay to Cuba and the Antilles. It is not uncommon in Florida

in winter, where it may be distinguished from the local species (*Anas fulvigula*) by its darker color and streaked throat.

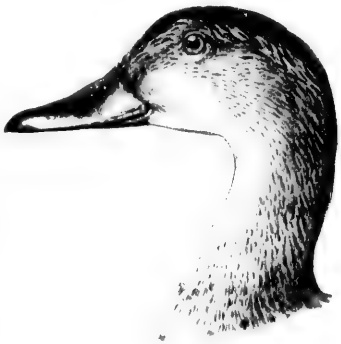
The nest is placed on the ground, the eggs being pale greenish white, and usually from nine to twelve in number.

The male says: "Drake, drake, drake, drake," and also "Shwipe," in a husky voice; the female, "quacks."

This species may always be distinguished from the female of the Mallard by the absence of white on the speculum.

ANAS FULVIGULA *Ridgway.*

Florida Black Duck.



Adult male: Upper mandible, yellowish olive; nail and spot at base of mandible, black, sometimes mixed with dull orange; under mandible, yellowish olive, dusky at tip; legs and toes, pale orange, with the webs red; iris, brown.

Adult female: Legs and toes, dull Indian red; webs, mottled brownish and flesh color; upper mandible, yellowish olive, showing a brownish stripe on the middle, and the nail and a spot at the base, black; under mandible, pale orange yellow.

General appearance of the Northern Black Duck, but lighter, and having the **throat and cheeks almost without streaks and very pale buff in color.**

Length, 20; wing, 10.20; bill, 2; tarsus, 1.70.

This species is resident in Florida, and also occurs on the Gulf coast west to Louisiana.

The nest is placed on the ground, usually in a marsh near water. Incubation commences the latter part of March or early in April. The eggs are pale brown, often showing a greenish tinge, and numbering usually eight to ten, but I have heard of fourteen being taken from one nest. The note resembles that of the Black Duck.

ANAS FULVIGULA MACULOSA (*Senn.*).

Mottled Black Duck.

Special Character: Male: Top of head, blackish brown, margined with very pale buff; chin and throat, isabella color; cheeks, buffy white, with narrow streaks of dark brown; feathers of breast, wings, upper parts, and flanks, blackish brown, margined with pale buff; under parts, buffy white, each feather with a broad blackish brown spot near the tip, giving a decidedly mottled appearance. Under tail coverts, blackish, with outer margin of inner web reddish buff, with inner web buffy white; the four median feathers of tail, blackish brown; all the others fuscous, margined with pale buff, having a V-shaped mark, as in *A. fulvigula*, but of a buffy white. Under surface of all tail feathers, light gray, excepting four median, which are blackish brown; lining of wing, white; speculum, metallic purple; feathers, tipped with white; bill has a small black spot on base of lower edge of upper mandible, as in *A. fulvigula*; feet, reddish orange.

Wing, 10.05; culmen, 2.25; tarsus, 1.75; middle toe and claw, 1.50 inches.

Female: Similar to the male, excepting that there is no black spot on the bill at the base of the upper mandible.

Wing, 10; culmen, 1.90; tarsus, 1.60; middle toe and claw, 1.45 inches. — SENNETT, Auk, 1889, p. 263.

The Mottled Black Duck occurs from Eastern Texas north to Kansas.

SUBGENUS **CHAULELASMUS** BONAPARTE.

Anas strepera (male).

ANAS STREPERA *Linn.*

Gadwall.

GRAY DUCK. CREEK DUCK.

Adult male: Top of head, brownish, finely streaked and mottled with black and dark brown; neck and breast, mottled (black and white), the feathers being black, having a central white mark; under parts, white (sometimes grayish white). Under tail coverts, black, upper

tail coverts and rump, black: **speculum, black and white**; the lesser wing coverts, chestnut: bill, black: feet, orange: **axillars, white, with white shafts.**

Length, 19.50: wing, 10: bill, 1.60.

Adult female: Somewhat resembles the male, but has the under wing coverts pure white, and usually little or no chestnut on the lesser wing coverts.

Length, 19: wing, 10.15: bill, 1.55.

Ranges throughout North America, from the fur countries to Central America, Gulf of Mexico, Cuba, and Jamaica, although it is not common on the Atlantic coast north of Florida and Georgia. It breeds commonly in the interior, from Kansas northward to high latitudes.

The eggs are usually from nine to twelve, and buffy white in color. The note of the male somewhat resembles the soft call of a deer, or, perhaps, the squeak of a door; the female "quacks" softly.

SUBGENUS **MARECA** STEPHENS.

(Male.)

ANAS AMERICANA *Gmel.*

Baldpate. American Widgeon.

Adult male: Head, speckled black and white: top of head, white: a broad stripe of greenish from eye to the occiput: chin, blackish: upper breast, pale ashy lilac or vinaceous: rest of under parts, pure white; crissum and under tail coverts, black: back, ashy vinaceous,

finely pencilled with black; a broad patch of white on the wing; most of the secondaries have the outer web black edged with white; the inner webs are grayish towards the tip; speculum, black and green; axillary plumes, **white with dark shafts.**

Adult female: Head and throat, whitish or buffy white, streaked and mottled with black; back, grayish brown; tertials, dusky, edged with whitish.

Length, 19; wing, 10.50; tarsus, 1.60; bill, 1.40.

This species ranges nearly throughout North America, but does not breed on the Atlantic coast, as far as known. It is very common in winter in our Southern States, and is found in the West Indies, Central America, and Northern South America. It breeds in the interior; the eggs are from eight to twelve, pale brownish white in color.

Note of the male is three soft whistles, "Do, mi, do," of the scale; the female "quacks."

ANAS PENELOPE *Linn.*

European Widgeon.

The European Widgeon (*Anas penelope*), which occasionally wanders to our shores, has the head cinnamon, speckled with brown, while the American Widgeon has the head grayish, speckled with dusky. The females somewhat resemble each other, but the head and throat of the European bird is pale brown.

SUBGENUS **NETTION** KAUP.

ANAS CAROLINENSIS *Gmel.*

Green-winged Teal.

Adult male: **Head and neck, chestnut brown;** a patch of green behind the eye extending to the nape: crown feathers are somewhat elongated, forming a small crest: sides and back, pale, marked with narrow fine lines of black: under parts, white, shading into pale brown or buff on the breast, which is also spotted with black: speculum, green, bordered with black and chestnut.

Male. Anas carolinensis. (Female.

Adult female: Top of head, brownish, margined with reddish brown: throat and side of neck, white, spotted with black: breast, brownish with black spots: rest of under parts, white, sometimes showing black spots on the under tail coverts.

Length, 14.50: wing, 7.20: tarsus, 1.25: bill, 1.50.

The Green-winged Teal ranges throughout North America, breeding north of the United States. It is common in our Southern States in winter, and occurs in the West Indies and Central America. It breeds from our interior Northern States and New Brunswick northward. The eggs are pale brownish white and usually number from seven to twelve. The male whistles sharp and low, and the female "quacks."

SUBGENUS **QUERQUEDULA** STEPHENS.

ANAS DISCORS *Linn.*

Blue-winged Teal.

Adult male: Head, gray with purplish gloss, darkest on top: **a white patch resembling a crescent in front of the eye;** greater and middle wing coverts, pale grayish blue, forming a grayish blue patch on the wing: speculum, rich green: under parts, purplish gray, spotted on the breast with black: the flanks are narrowly barred with black: bill, black: feet, yellow.

(Male.) Anas discors. (Female.)

Adult female: Showing a blue patch on the shoulder which distinguishes it from other Teals, except the female of *Anas cyanoptera*, which has the chin dusky: and the upper throat often tinged with rufous. The locality where it is taken should also be considered.

This well-known species ranges throughout North America, breeding chiefly north of the United States. It is very common in Eastern United States during migrations, and rather rare west of the Rocky mountains, although it occasionally occurs on the Pacific coast. In winter it ranges to the West Indies and northern South America, and is common in Florida. The eggs are pale buff, usually from eight to twelve in number. The male whistles, and the female "quacks."

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ANAS CYANOPTERA *Vieill.*

Cinnamon Teal.

Male.

Adult male: **Head, neck, and upper parts, chestnut brown,** the crown somewhat darker than the sides of the head; under parts, brownish, showing dusky on the belly; rump, olive brown, feathers becoming lighter on the edges; wing coverts, blue gray, similar to the Blue-winged Teal; speculum, green; the general coloration of the wing being similar to the Blue-winged Teal, but the coloration of the body is so different that it should never be confounded with that species.

Adult female: Resembles the female of the Blue-winged Teal, although somewhat larger; the bill is larger, and the under parts usually show at least a trace of the chestnut marking of the male; the throat, more speckled; chin, dusky and often with rufous tinge, otherwise apparently similar to *Anas discors.*

Length, 16; wing, 7.50; bill, 1.75; tarsus, 1.30.

The Cinnamon Teal ranges from British Columbia to South America, being abundant on the Pacific coast, but rare east of the Rocky Mountains, although it occurs more or less regularly in winter along the Gulf coast to Florida and in the Mississippi Valley (accidental in Illinois). The nest is placed on the ground, and is composed of grass lined with feathers; the eggs are from nine to fourteen, and are pale bluish white or cream white in color.

The European Teal (*Anas crecca*) occurs occasionally in North America. It resembles our Green-winged Teal; but the males may be distinguished by the white bar in front of the wing, which is noticeable in the American bird, but absent in the European. The females are very similar, and I am unable to find any tangible characters by which they may be distinguished.

GENUS SPATULA BOIE.

SPATULA CLYPEATA (*Linn.*).

Shoveller. Broad-bill.

Adult male: **Bill, very much broadened**; head and neck, dark green; breast, pure white, shading into purplish chestnut on the belly; wing coverts, blue; speculum, green, edged with white; feet, orange red.

Length, 20; wing, 9.50; bill, 2.70; tarsus, 1.50.

Adult female: Head and neck, mottled and streaked with pale brown and dark brown or

(Female. Male.)

black; under parts, brownish, mottled and spotted with fuscous, scarcely showing on the middle of the belly; speculum and wing coverts as in the male.

Immature male: Intermediate in plumage between the adult male and female, but the speculum shows but little green, and the wing coverts are slaty gray; the head is often blotched and mottled when changing to adult plumage.

Length, 19.50; wing, 9.50; bill, 2.60; tarsus, 1.50.

The Shoveller, or Broad-bill Duck, occurs throughout the Northern Hemisphere, being common in the interior.

It ranges in winter to South America and the West Indies, and is one of the common species in Florida and the Gulf States. It breeds in the interior from Minnesota northward. The eggs are pale buff white, usually from six to ten in number. The note of the male is a gutteral short "Thuck, thuck" the female "quacks."

GENUS DAFILA STEPHENS.

DAFILA ACUTA (*Linn.*).

Pintail. Sprigtail.

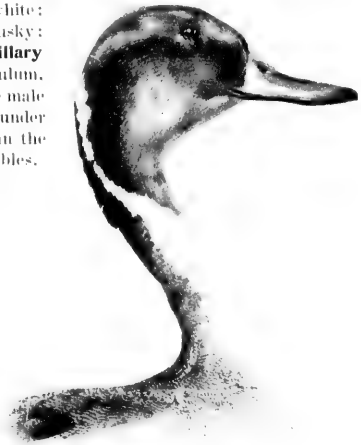
Adult male: **Bill, lead color, the base and a stripe along the culmen, black; head and neck, rich brown,** sometimes showing a faint gloss of green on the feathers; sides of the neck showing a stripe of white, and a stripe of black extending down the back of the neck; under parts, white, showing faint, wavy, fine lines of dusky on the sides; crissum, black, edged with white; **central tail feathers, very much elongated** in the male; **feet, lead color.**

Length, 28; wing, 9.50; tail, 7; bill, 2.

Adult female: Tail feathers, not so much elongated as in the male, but broad and pointed; crown and sides of the head, streaked with dusky and pale brown; breast, spotted with dark brown or black; under parts, white; abdomen and sides showing faint lines of dusky; under wing coverts, fuscous, edged with white; **axillary plumes, white, barred with dark brown;** speculum, grayish brown edged with white. The immature male shows considerable variation in plumage, the under parts being usually more streaked or spotted than the adult female, which it otherwise somewhat resembles.

Length, 22; wing, 9.25; tail, 3.50; bill, 2.

Dafila acuta (female).



(Male.)

This fine duck ranges throughout the Northern Hemisphere, breeding in the interior from Illinois northward; it apparently does not breed on the Atlantic coast, but is common in winter from Virginia and the Carolinas southward to the West Indies and Central America, being very abundant in Florida in winter in some localities.

The eggs are usually from seven to twelve, and are bluish white in color. The female Pintail may always be recognized by the pointed middle tail feathers and the **barred axillary plumes.**

The male whistles and the female "quacks."

GENUS AIX BOIE.

AIX SPONSA (*Linn.*).

Wood Duck. Summer Duck.

Adult male: Bill, red, marked with rose-white, and a black stripe on the middle of the upper mandible and tip; under mandible, black; head, with decided crest, which shows white metallic green, and purple; a narrow superciliary line from the bill to the occiput and another stripe of white behind the eye, extending to the nape; chin and throat, white, extending upwards in a streak on sides of the head to the ear coverts; sides and front of the lower neck and under breast, purplish chestnut, dotted with white spots; under parts, white, sides sometimes grayish, showing faint pencilling of dusky lines; upper parts showing bronze-green and purple; speculum, bluish green edged with black and white.

(Female.)

(Male.)

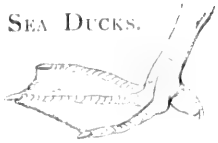
Length, 18.50; wing, 9.50; bill, 1.10.

Adult female: Crest, small, but the feathers somewhat lengthened; head and neck, grayish, whitening on the chin and front of the eyes; front of the neck and breast, pale brown, mottled with grayish; the breast showing numerous brown spots, which fade away on the lower breast; belly, white.

Length, 18; wing, 9.30; bill, 1.35.

This beautiful Duck ranges from the Gulf of Mexico and Cuba northward to Hudson's Bay, breeding nearly throughout its range. The eggs are pale brownish white, and usually number from seven to fourteen. The nest is placed in a hole in a tree, from which the young are taken, when large enough, in the bill of the parent. The little ones often clamber upon their mother's back and rest there contentedly while she swims about in search of food. It is essentially a fresh water duck, frequenting inland ponds and rivers.

SUBFAMILY FULIGULINÆ. BAY AND SEA DUCKS.



Ducks having flap or membraneous lobe on hind toe.

GENUS AYTHYA BOIE.

AYTHYA AMERICANA (*Eyt.*).

Red-head Duck.

Adult male: **Head and neck, brownish chestnut;** lower neck and upper breast, blackish: **back**, apparently grayish, being white pencilled with fine, **wavy lines of black;** speculum, **grayish**: upper feathers edged with black, the rest narrowly tipped with white.

Length, 21: wing, 8.40: tarsus, 1.60: bill, 2.20.

Male. Aythya americana. (Female.

Adult female: Bill, bluish, showing an indistinct bar near the end: head and neck, **reddish** brown, palest on the sides of the head, becoming ashy on the sides of the head: **upper** throat, white: breast and sides, brownish: belly, white: under tail coverts and lower **belly**, sometimes washed with pale brownish.

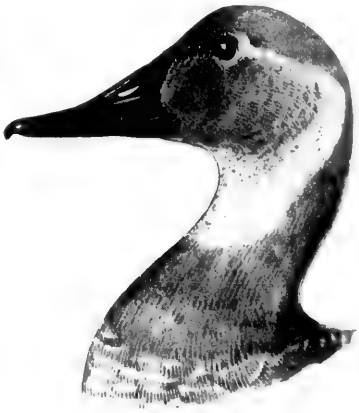
Length, 20.50: wing, 8.30: tarsus, 1.60: bill, 2.20.

The Red-head is rather a Western species, being common in the interior, and breeding from Minnesota, northward. It is very abundant from Virginia

to the Carolinas during the winter, in suitable localities, and some birds occur regularly in Florida and the northern West India Islands. The Red-head may always be distinguished from the Canvas-back by the decided difference in the shape of the bill, the forehead arching abruptly and not following the line of the bill as in the Canvas-back.

The female Red-head closely resembles the female of the Ring-necked Duck, but is larger. As a rule it does not breed on the Atlantic coast, although a single instance is on record of a pair being found breeding near Calais, Maine. The nest, which is placed on the ground, is composed of grass and lined with down. The eggs are eight to twelve, brownish white in color.

Aythya vallisneria (male).



(Female.)

AYTHYA VALLISNERIA (*Wils.*).

Canvas-back Duck.

Adult male: **Head and neck, rufous** brown, becoming dusky on the crown and chin; the breast and upper portion of the back, blackish; rest of upper parts and wing coverts showing fine, wavy lines of black, general appearance being grayish; belly, white, the lower portion faintly lined with dusky; sides, white, showing the delicate lines as on the back, but very much fainter and sometimes wanting.

Adult female: Head and neck, cinnamon brown, paler on the throat; belly white or grayish white.

Length, 20 to 22; wing, 8.75 to 9.25; bill, .75 to .80; tarsus, 1.70.

The peculiar formation of the bill will always distinguish the Canvas-back from the Red-head, which is the only species with which it could be confounded.

The Canvas-back occurs throughout North America, but is more common in the interior than on the coast. It is abundant in winter, however, about Chesapeake Bay and in favorable localities along the coasts of the Carolinas, and a few birds wander as far south as Cuba and Jamaica. It occurs in Florida but is not common. It breeds from Minnesota west, and north to Alaska. The nest, which is composed of grass usually lined with more or less down, is built on the ground in a marsh or on the low banks of some lake or stream. The eggs are pale brownish white, sometimes bluish white, usually from seven to ten in number. The Canvas-back has acquired an exalted reputation among epicures, but given the same environment and food, and both the Red-head and Ruddy Duck will equal it in flavor and delicacy.

The Rufous Crested Duck, *Netta rufina* (Pall.), is supposed to have been taken on our Atlantic coast, a fresh bird being offered for sale in Fulton Market, New York City, which was supposed to have been shot on Long Island. The bird was an immature male.

AYTHYA MARILA NEARCTICA *Stejn.*

American Scaup Duck.

BLUE-BILL. BLACK-HEAD.

Adult male: Head and neck and upper breast, black, showing greenish reflections; back grayish white, delicately lined with fine, wavy lines of black, giving it a grayish appearance; **speculum, white;** under parts, white, the lower belly showing grayish tinge.

Length, 19; wing, 8.50; tarsus, 1.50; bill, 2.

Adult female: Patch at the base of the bill, white or grayish white; rest of the head and neck, breast, and upper back, brownish; belly, white; **speculum, white.**

Length, 17.75; wing, 8.25; tarsus, 1.30; bill, 1.60.

Aythya marila nearctica (male).

(Female.

This species occurs throughout North America, breeding north of the United States. It ranges in winter south to the Bahama Islands and Guatemala, although it is not nearly as abundant in Southern waters as *A. marila affinis*, to which it is very closely allied. There are, apparently, no constant characters (with the possible exception of size) by which it may be separated from that species; the head, as a rule, shows greenish reflections, while the Lesser Scaup Duck *generally* has the head glossed with purplish, but these characters cannot be always depended upon and the main difference is one of size.

The eggs are described as being pale olive buff, and number from six to ten. The nest is built on the ground.

The only duck (except the Lesser Scaup Duck) with which this common bird is likely to be confounded is the Ring-neck, and it can always be distinguished at a glance from that species by the **white** band on the wing (speculum), which is always **gray** in the Ring-neck.

AYTHYA AFFINIS (*Eyt.*).

Lesser Scaup Duck.

BLUE-BILL.

Male: Resembles the male of the preceding species but is somewhat smaller in size: the head generally shows a faint gloss of purplish, which in the Greater Scaup Duck is usually greenish.

Length, 17: wing, 8.10: tarsus, 1.50: bill, 1.80.

The female resembles the female of the preceding species, but is smaller: the **speculum,** of both male and female, **is white,** and this duck may always be distinguished from the Ring-neck by this character.

Length, 16.50: wing, 7.70: tarsus, 1.25: bill, 1.50.

This bird ranges throughout North America, breeding north of the United States, and occurs in winter south to Guatemala and West Indies. It is the most common species in Florida, being one of the first to arrive and among the last to leave the State. I have seen small flocks of them in the rivers as late as the first of May. The note of this and the Greater Scaup Duck is peculiar, difficult to describe, but rather easy to imitate. It somewhat resembles the sound made by rubbing the finger quickly and lightly over a roll-top desk.

AYTHYA COLLARIS (*Donov.*).

Ring-neck Duck.

Adult male: Head, and neck, upper breast, and **upper back, black,** usually showing faint bluish reflections when held in the light. In the breeding season the male has an orange chestnut collar, which is usually lacking later in the season; belly, white, with the lower belly finely lined with blackish; **speculum, gray;** bill, dusky, showing a faint bluish gray band near the end.

Adult female: Head, brownish, the sides mixed with grayish brown shading into whitish on face about base of the bill; belly, whitish, becoming grayish on the lower portion; bill, as in the male. Resembles the female Red-head Duck, but is smaller.

Length, 17; wing, 8; bill, 2.

Aythya collaris (male).

Aythya collaris (female).

The Ring-neck Duck ranges throughout North America, breeding north of the United States. It occurs in winter as far south as Guatemala and the West Indies.

The female resembles the female Red-head, but is easily distinguished from that species by its smaller size, and its gray speculum will always distinguish it from the Scaup Ducks. The note is somewhat similar to that of the Scaup Ducks. In winter the collar of the male is usually absent or but slightly indicated.

Unlike the Scaup Ducks the Ring-neck prefers fresh or slightly brackish water, and is much more common in the interior than on the coast; it breeds in the interior from Minnesota and Iowa northward. The nest is composed of grass placed on the ground; the eggs are olive buff color, six to twelve in number

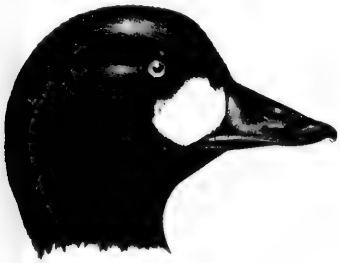
GENUS GLAUCIONETTA STEJN.

GLAUCIONETTA CLANGULA AMERICANA (*Bonap.*).

American Golden Eye. Whistler.

Male: Head and throat, **glossy dark green;** a patch of white on cheeks at the base of the bill, rather round in form; lower throat and under parts, white, encircling the neck and extending slightly upon the upper back; back, black; wings, black; many of the secondaries, white, and the wing coverts, heavily marked with white, giving the appearance of a very broad white patch on the wing.

Length, 19.50; wing, 9; bill, 1.50; side of bill, 1.90; tarsus, 1.70; tail, 3.80.



(Male.)

(Female.)

Female: Head and throat, brown; neck, whitish; upper breast and sides of the body, strongly tinged with gray, the ends of the feathers being whitish; rest of the under parts, white; back, brownish black; wings, black; secondaries, being mostly white, forming a broad, white wing band; wing coverts, tipped with gray.

Length, 16.50; wing, 8.25; bill, 1.30; side of bill, 1.80; tarsus, 1.25; tail, 3.75.

The Golden Eye ranges generally throughout North America, breeding from Maine and the British Provinces northward. It winters from New England, where it is well known to gunners by the name of "Whistler," southward, and stragglers have been recorded from Barbados, Cuba, and Mexico. The nest is placed in a tree or hollow stump. The eggs are dull bluish white, usually from eight to ten in number.

GLAUCIONETTA ISLANDICA (*Gmel.*).

Barrow's Golden Eye.

Glaucionetta islandica (male).

Male: **Head and neck, dark bluish purple;** rest of under parts, white; a **crescent-shaped spot of white** on the cheeks at base of bill; a band of white about two inches wide passes around the neck and joins the white of the sides and breast; rest of upper parts, black; wings, black; and wing coverts, heavily marked with white, and many of the secondaries, white; tail, black.

Wing, 9.25; bill, 1.25; on side, 2; tail, 4; tarsus, 1.50.

Female: Resembles the female American Golden Eye but is somewhat larger; **head, cinnamon brown;** lower throat and under parts, white, tinged with gray on the upper breast and sides of the body; back, gray, slightly mottled with brown, shading into brown on the rump; wings, black; many of the secondaries, white, and the greater and lesser wing coverts, tipped with grayish white.

Wing, 8.60; bill, 1.50; on side, 2.

While the male birds of this and the preceding species are quite different, the females cannot always be distinguished. The female Barrow's Golden Eye is usually larger; and the locality where the specimen is taken should always be considered. Barrow's Golden Eye is rare on the Atlantic coast, while the American Golden Eye is one of the most well-known birds to New England gunners, who know it under the name of "Whistler." It breeds from the Gulf of St. Lawrence and northern Rocky Mountains, northward to Greenland and Alaska; the nest is usually placed in a hollow stump or tree. The eggs are pale grayish blue, usually from seven to ten in number, and measure 2.40 x 1.75 inches.

GENUS CHARITONETTA STEJN.

CHARITONETTA ALBEOLA (*Linn.*).

Buffle-head. Butter-ball. Spirit Duck. Dipper.

Adult male: **A very small duck; head, upper neck, and throat, greenish purple,** showing various reflections of bluish and greenish: **a large white patch on the head,** from the eye backwards: back, black: under parts, white: bill, lead color: feet, flesh color: wing coverts, and some of the secondaries, heavily marked with white, forming a broad, white wing patch.

Length, 12.75: wing, 6: tarsus, 1.20: bill, 1.

Charitonetta albeola (male)

Female.

Adult female: Head and upper parts, brownish, showing a grayish white patch on the side of the head: under parts, white: speculum, white.

Length, 12.50: wing, 5.75: tarsus, 1.20: bill, 1.

The Buffle-head occurs throughout North America, ranging south in winter to Cuba and Mexico, breeding northward from Maine to Alaska. The nest is usually built in a stump or hollow tree. The eggs are pale buff in color, from eight to ten in number.

GENUS CAMPTOLAIMUS GRAY.

CAMPTOLAIMUS LABRADORIUS (*Gmel.*).

Labrador Duck. Pied Duck.

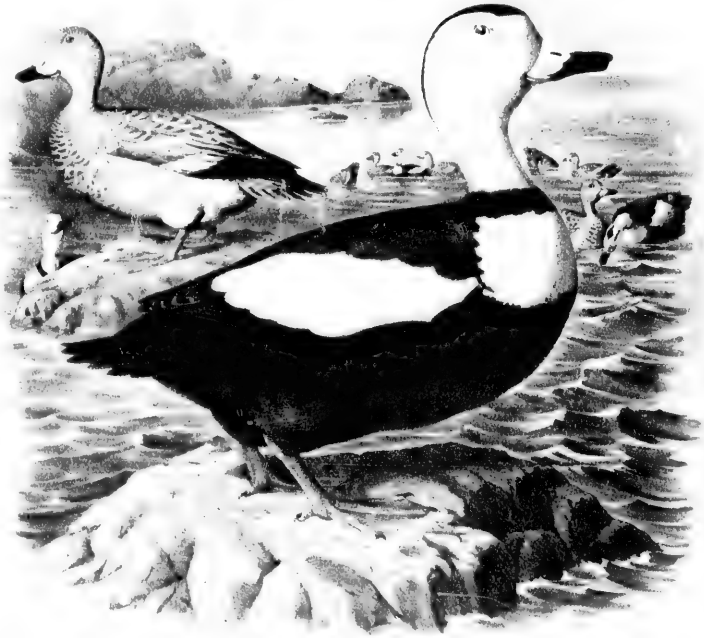
Adult male: Head, neck, and upper breast, wing surface including scapulars, wing coverts, and secondaries, white; a collar around the neck, and a stripe extending over the forehead along the top of the head to the base of the skull, black; rest of plumage, including upper back, primaries, and under parts, black; legs and toes, ashy; webs, black; terminal half of bill, black; basal half, pale orange, the latter color extending along the edges of the mandible for two-thirds the length of the bill; iris, dark hazel.

Adult female: General plumage, brownish ash with a bluish tinge on the feathers of the back, and wing coverts; secondaries, white, forming a wing band; tertiaries, ashy, edged with black; bill and feet, as in the male.

Length, about 19; wing, 8.25; tail, 2.45; tarsus, 1.95; bill, 1.45.

The Labrador Duck, or Pied Duck as it is sometimes called, is now, probably, an extinct species, although its disappearance is of comparatively recent date. Why such a strong flying bird, and one so eminently able to take care of itself, as this duck must have been, should have become extinct, is one of the secrets of nature.

My friend, the late Mr. George N. Lawrence, told me he had often seen Labrador Ducks offered for sale in Fulton Market, New York City, somewhere back in the forties. As far as we know there are but forty-two specimens of this bird now preserved in various museums and private collections of the world.



LABRADOR DUCK.

Female. Male.

GENUS CLANGULA LEACH.

CLANGULA HYEMALIS (*Linn.*).

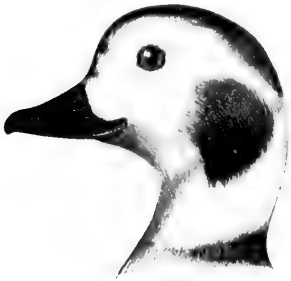
Old Squaw. Old Wife. South Southerly. Long-tailed Duck.

Adult male in winter: Central **tail feathers, black, much elongated;** outer tail feathers, white; top of the head and back of the neck to back, white; a patch of grayish on the sides

Male, winter plumage.

Summer.

of the head, including the eye, which is succeeded by a patch of black on the sides of the neck, bordered on the lower throat by an indication of brown; throat and upper breast, pure white; breast and upper belly, black, the black continuing over the back in a band; lower belly and under tail coverts, white; wing coverts, black; quills, brown; a pale yellowish band across the end of the bill.



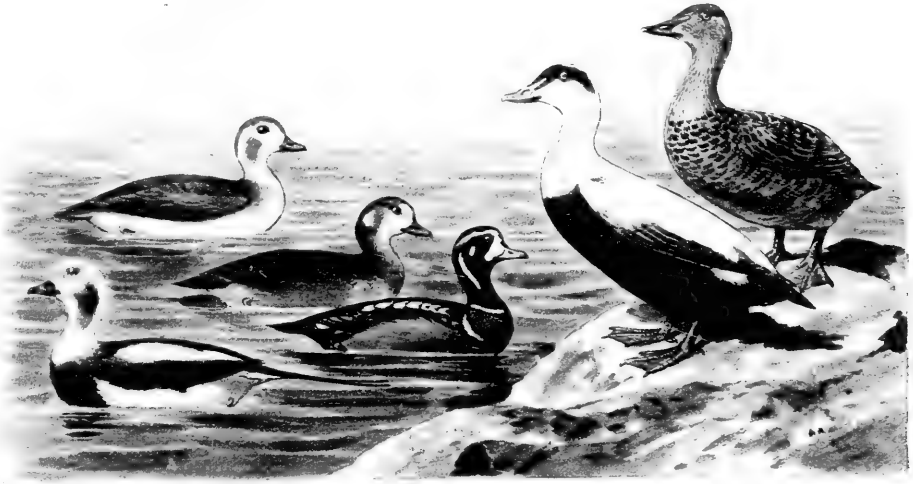
Female.

Male in spring: Head, smoky brown or black; crown, black; a white patch on the face including the eyes; entire neck and breast, smoky brown or black; rest of under parts, dull white; feathers of the upper back and scapulars edged with rufous.

Adult female in winter: Head, dull white on the crown, and a patch on the side of the back of the head, smoky black or brownish black; under parts fuscous; breast, grayish; belly, white; tail feathers, pointed, but not elongated as in the male.

Length (including tail), 21; wing, 8.50; bill, 1.10.

"Northern Hemisphere in North America, south to the Potomac and the Ohio (more rarely to Florida and Texas) and California; breeds far northward." (A. O. U.)



OLD SQUAW. HARLEQUIN DUCK. EIDER DUCKS.

Male. Female. Female. Male. Male. Female.

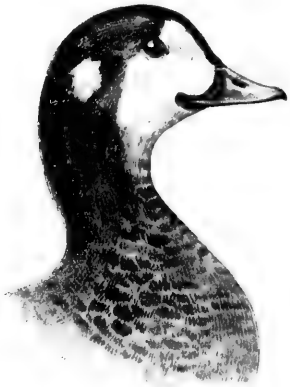
The Old Squaw is one of the most common species of sea ducks and is well known to gunners along the New England coast. Many remain all winter, but others wander further south, and I have occasionally killed them in Florida, where, during the winter of 1894–5, they were not uncommon. The nest is placed on the ground; the eggs are pale bluish green, usually from seven to twelve.

GENUS HISTRIONICUS LESSON.

HISTRIONICUS HISTRIONICUS (*Linn.*).

Harlequin Duck.

Histrionicus histrionicus (male).



Histrionicus histrionicus (female).

Adult male: Head, variously marked with gray, white, rufous brown, and black; a collar of white edged with black passes around the neck; a broad band of white edged with black commences on the sides of the breast and extends upwards; under parts, grayish brown; sides heavily marked with rufous brown; back, dark slate; the scapularies and tertials marked with white; speculum, very dark blue; under tail coverts, bluish black, showing a spot of white on the sides; tail, pointed.

Wing, 7.50; bill, 1; sides of bill, 1.35; tail, 4.50; tarsus, 1.25.

Adult female: Head, grayish brown; face, whitish; spot of white on the ear coverts;

entire upper plumage, dull brown: some of the feathers slightly washed with grayish: breast, grayish brown: rest of **under parts, mottled grayish brown;** wings and tail, brown, *without white.*

"Northern North America, breeding from Newfoundland, the northern Rocky Mountains, and the Sierra Nevada, northward: south, in winter, to the Middle States and California." (A. O. U.

The Harlequin Duck is nowhere very common, and seems to avoid warm weather. On the Atlantic coast it rarely is found as far south as Massachusetts during the coldest winters: but it is not uncommon on some parts of the coast of Maine at that season. Occasionally, stragglers wander south, and a specimen is alleged to have been taken near Gainesville, Fla.

During the winter months it becomes a sea duck, but it builds its nest in hollow stumps and trees along the banks of the cold mountain streams and lakes of our interior Northern States (Rocky Mountains and Newfoundland northward). The eggs are described as pale yellowish brown or greenish buff, the number being usually seven or eight. A nest in my collection contains six eggs, which measure 2.25 x 1.70.

GENUS SOMATERIA LEACH.

SUBGENUS SOMATERIA.

SOMATERIA MOLLISSIMA BOREALIS (*Brehm*).

Northern Eider Duck. Sea Duck.

Male: Top of the head, black, with a stripe of white on the middle of the crown; occiput, pale green, the color extending on the sides of the neck; **rest of the head, breast, and back, white,** faintly tinged with dull pinkish on the breast; rest of the under parts, black; tail, black; points of divided culmen, **pointed.**

Wing, 11.25; bill (culmen), 2; gape, 2.50

Female.)

Male.

Female: General color, pale rufous brown, mottled, and banded with black; head, tawny brown, faintly lined and dotted with black; some of the secondaries tipped with white.

Wing, 11.50; bill (culmen), same as male.

The Northern Eider differs from the American Eider Duck in having the points of the divided culmen (which extend upward on sides of the forehead) **pointed** and not rounded at the ends as in that species. (See cut.)

This species occurs in "northeastern North America including Greenland, south in winter to coast of Massachusetts." (A. O. U.) It breeds from Labrador northward; eggs eight or less of a pale bluish white or dull greenish white.

Dresser's Eider Duck.
Somateria dresseri.

Northern Eider Duck.
Somateria borealis.

SOMATERIA DRESSERI *Sharpe.*

American Eider. Sea Duck.

The American Eider Duck closely resembles the Northern Eider, there being no tangible differences which can be relied upon except the difference in shape of the divided culmen, the points of which are broad and rounded, and not pointed as in the northern species. (*See cut.*

Length, 23; wing, 10.75; tarsus, 1.75.

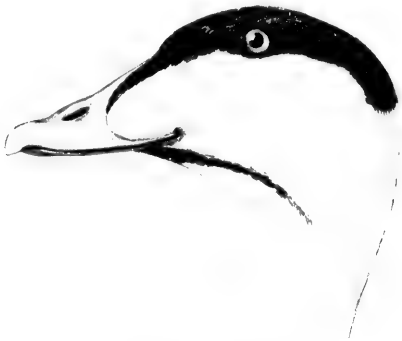
This species occurs along the coast of North America from Maine to Labrador. In winter it has been found as far south as Delaware, and it also occurs on the Great Lakes. It breeds from the coast of Maine northward, the eggs being usually eight or less, pale bluish gray or dull greenish olive, and measure about 2 x 3. It is from the breast of the Eider Ducks that the far-famed eider down is taken. In Iceland, many men make a business of gathering it, and hundreds of pounds are annually exported. The female plucks the down from her breast to make a soft lining for her nest, and it is claimed that a single nest will often yield two ounces of feathers.

SOMATERIA V-NIGRA *Gray.*

Pacific Eider.

Special characters. Male: Similar to *S. dresseri*, but somewhat larger, and the bill somewhat broader and deeper, with large V-shaped black mark at throat.

Female: Similar to *dresseri*; but *dresseri* does not occur on the Pacific coast.



Pacific Eider (male).

The Pacific Eider occurs commonly along the coast of the North Pacific Ocean, and also in the interior to the Great Slave Lake. The eggs are pale grayish green, measuring about 2 x 3 inches.

SUBGENUS ERIONETTA COUES.

SOMATERIA SPECTABILIS (*Linn.*)

King Eider Duck.

Special characters. Male: Top and back of the head and nape, pale bluish gray; a black V on the upper throat; feathers bordering the upper mandible and a spot below the eye, black; side of head below the eye, whitish, more or less tinged with green; throat, white; breast and upper back, pale buff; rest of under parts, black; middle and greater wing coverts, white; rest of wings, tail and lower back, black; upper back, white; axillars, white.

Length, 24; wing, 11.25; tarsus, 1.90; bill, 1.30.

Special characters. Female: Resembles in general coloration the Northern and American Eiders but may always be known by the peculiar shape of the upper mandible.

Length, 21 to 24; wing, 10.50 to 11.30; tarsus, 1.80; bill, 1.25.

Somateria spectabilis.

Geographical distribution: "Northern parts of Northern Hemisphere, breeding in the Arctic regions in North America; south, casually, in winter to Georgia and the Great Lakes." (A. O. U.)

The King Eider breeds from Labrador, northward, and, according to Boardman, a few pairs have been known to breed in the Bay of Fundy, Maine. The nest is usually a mass of twigs or moss lined with down. The eggs are from six to ten, pale green in color, and measure about 2.55 x 1.90. On the Pacific coast they are very abundant in winter about the Aleutian Islands.

GENUS ARCTONETTA GRAY.

ARCTONETTA FISHERII BRANDT.

Spectacled Eider.

Special characters. Male: A large spectacle-like, silvery white patch enclosing the eye, narrowly bordered with black; throat, white; forehead, and feathers at base of bill, whitish; rest of head, pale olive or grayish olive; the feathers on the occiput, somewhat elongated; breast, dark slaty, becoming slaty brown on rest of underparts and sides; back, scapulary plumes, and wing coverts, white; rump and tail, like belly; axillars, ashy white, the shafts often slightly tinged with brownish.

Wing, 10; tarsus, 1.45; bill (culmen), 1; nostril to tip, 1.15; angle of mouth to tip, 2.

Special characters. Female: The peculiar spectacle-like patch enclosing the eye but slightly indicated, and pale buff or grayish buff; throat, buffy white; face, tinged with brownish; crown, and back of the head, mottled, and narrowly streaked with buff and dark brown; entire under parts, pale brown, faintly and irregularly barred with darker brown; feathers of the back, dark brown, tipped with tawny brown, and pale rufous brown; axillars as in the male; quills and tail, dark brown, with pale brown shafts. The female is smaller than the male.

Wing, 8.75; tail, 3.50; tarsus, 1.45; bill (culmen), .75; bill, from nostril, .90; angle of mouth to tip, 1.89.

Female Male

Geographical distribution: Alaskan coast of Behring Sea, and north to Point Barrow, A. O. U.

The Spectacled Eider seems to have a very limited range, and is apparently nowhere common. It is known to breed in the vicinity of the Island of St. Michael, Alaska, and a set of eggs, taken in that locality, in the Smithsonian collection, are pale olive gray, and measure about 2.10 x 1.65.

GENUS ENICONETTA GRAY.

ENICONETTA STELLERI.

Stellers' Duck.

Special characters. Male: Greater portion of the top and sides of the head, white; front of the head, greenish; an olive green patch on the occiput; a small patch of blue black around the eye and another on each side of the occiput; throat and a broad collar around the neck, blue black; back, dull black, shading into blue black on the rump and upper tail coverts; outer webs of scapulary plumes, glossy blue black or purplish; inner webs, mostly white; wing coverts, white; axillars, white; breast, whitish, below the black collar shading into tawny buff and then chestnut brown becoming gradually darker, lower down, until the collar is smoky black on the lower abdomen; speculum, purplish blue.

Length, 15.50 to 18; wing, 8 to 8.60; bill, 1.40 to 1.60; angle of mouth to tip, 1.87.

Special characters. Female: Upper plumage, dusky mixed with fulvous; head and neck, light brownish, more or less speckled with dusky; breast, tawny brown, barred and spotted with dusky; belly, dark, smoky brown or sooty brown; speculum, showing tinge of purplish blue, but not brilliant as in the male; wing coverts tipped with buff gray or brownish gray.

Male

Geographical Distribution: "Arctic and subarctic coasts of the Northern Hemisphere, Aleutian Islands, east to Unalaska, and Kodiak; Kenai Peninsula." (A. O. U.)

Stellers' Duck is abundant in summer in Behring Sea and winters in large numbers among the Aleutian Islands. It was observed by Kumlien in Greenland in 1878. The eggs are usually from six to nine, grayish green in color, and measure about 2.20 x 1.60.

GENUS OIDEMIA FLEMING.

SUBGENUS OIDEMIA.

OIDEMIA AMERICANA SW. & RICH.

American Scoter. Black Coot. Butter-bill.

(Male.)

(Female.)

Adult male: **General plumage, entirely black;** bill, black, the upper mandible being yellowish orange at the base. **Feathers on the bill more than one-half inch from the nostril; no white on the wing.**

Adult female: Brownish, or sooty brown; paler on the under parts, becoming grayish white on the belly; sides of the head, whitish; **feathers on the bill more than one-half inch from nostril;** no white on the wing. The female is smaller than the male.

Length, 19; wing, 9.10; tarsus, 1.65; bill, 1.80.

This species breeds from Labrador northward; the eggs being described as pale brown or dull whitish brown, and from six to ten in number. It occurs on the Great Lakes, and ranges in winter south to Florida and California. On the New England coast it is a familiar bird to gunners who give it the name of Butter-bill Coot.

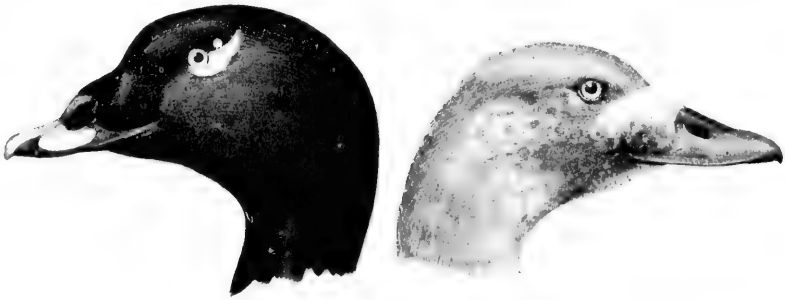
The Velvet Scoter (*Oidemia fusca*), a European species, has been taken in Greenland.

SUBGENUS **MELANITTA** BOIE.

OIDEMIA DEGLANDI (*Bonap.*).

White-winged Scoter. White-winged Coot.

Adult male: General **plumage, black;** *upper* mandible, orange, blackish at the base; a white spot under the eye and a broad patch **of white on the wing; feathers on the bill less than one half inch from the nostril.**



(Male.) (Female.)

Adult female: Is grayish brown, showing a wash of grayish white at the base of the bill and behind the ears; the **speculum is white,** which is a distinguishing character of this species.

Length, 21; wing, 11.15; tarsus, 2; bill (culmen), 1.75; side measure, 2.75.

Geographical distribution: "Northern North America, breeding in Labrador and the fur countries; south in winter to Chesapeake Bay, Southern Illinois and San Quentin Bay, Lower California." (A. O. U.

This species is common on the Atlantic coast during the migration, and is well known to New England gunners by the name of "White-winged Coot." The eggs are described as being buff or cream color, six to ten in number, the nest being placed on the ground.

COOT SHOOTING ON THE NEW ENGLAND COAST

SUBGENUS **PELIONETTA** KAUP.

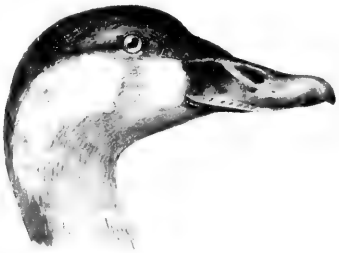
OIDEMIA PERSPICILLATA (*Linn.*).

Surf Scoter. Sea Coot. Skunk-head Coot.

Adult male: **General plumage, black, no white on the wing;** head, black, with a white patch on the forehead and nape; **feathers on the bill less than one half inch from the nostril.**

A peculiar highly colored bill is one of the distinguishing marks of the male of this species,

Male.



Female.

it being orange, yellow, black, and white, the feathers on the top of the bill extending much farther forward than on the sides.

Female and immature: Brownish, showing a whitish spot at the base of the bill, and back of the eyes; the female having the upper parts, brownish; under parts, ashy gray, shading into whitish on the belly.

Length, 20.50; wing, 9.60; tarsus, 1.65; bill (culmen), 1.50; side measure, 2.35.

This species may always be distinguished from *O. Americana* by the forward extension of the feathers on the top of the bill and from *O. Deglandi* by the absence of the white wing patch.

It is one of our most common Sea Ducks, called "Coots" by gunners, and occurs both on the Atlantic and Pacific coasts, and the large interior lakes. It ranges south in winter to Florida and Lower California, and stragglers have been taken in Jamaica. It breeds north of the United States, the eggs are described as being pale buff or dull white, and are usually from five to eight in number.

GENUS ERISMATURA BONAP.

ERISMATURA RUBIDA (*Wils.*)

Ruddy Duck. Bull Neck.

Adult male. Breeding plumage: Top of head and nape, black; sides of head, white; chin, whitish; throat, breast and sides of body, flanks, and rest of upper parts, deep rufous brown; wings, brown, without white patch; axillars, grayish white, with pale brown or grayish brown shafts; tail, black, the **feathers stiff and pointed.**

Adult male.

(Adult female.)

Adult female: The general color of the upper parts is brownish gray; sides of the head and throat, whitish, shading into gray on the lower throat and upper breast; under parts, silver white, as in the male.

Length, 15.30; wing, 6; tarsus, 1.20; bill, 1.50.

The Ruddy Duck may easily be distinguished from other species by its small size, chestnut brown color, and stiff, pointed tail feathers.

It occurs throughout North America, breeding locally nearly throughout its range. It occurs in winter south to Cuba and Guatemala and Northern South America, and has been recorded from many of the West India Islands, although great numbers remain in our Southern States during the winter. These birds, when fat, are much esteemed by epicures.

The eggs are described as six to ten in number, of dull white or buffy white, and the nest is usually built on a marsh, but is sometimes deposited on floating vegetable matter.

GENUS NOMONYX RIDGWAY.

NOMONYX DOMINICUS (*Linn.*).

Masked Duck.

Special characters. Male: Front of head, and face, black; back of head, and neck, rich, rufous brown, shading into pale chestnut, or tawny brown on the under parts; basal portion **of wing coverts, white, forming a white patch on the wing;** primaries, brown; feathers of the back, black, edged with rufous brown; tail, black, the feathers stiff and pointed; axillars, white; upper mandible, light blue, in life, showing a narrow middle stripe of black; feet, gray.

(Male.)

(Female.)

Female. Top of the head, and a stripe through the eye, and a cheek stripe, black, or brownish black; rest of the head, and upper throat, pale buff color, whitish on the chin; breast, tawny, mottled with black; rest of under parts, washed with tawny brown, shading into grayish on the abdomen; back, dark brown; the feathers tipped with pale brown, or tawny brown; wings and tail, as in the male; axillars, white.

Habitat: Tropical America in general, including West Indies; north on the Gulf coast to the Lower Rio Grande; accidental in Eastern North America (Wisconsin, Lake Champlain, Massachusetts). A. O. U.

The Masked Duck is a tropical species, accidental in North America. It is common in many parts of South America and the West Indies. Several specimens have been recorded as being taken in the United States, from New York, Wisconsin, and near Malden, Mass., the latter specimen I examined in the flesh, as it was sent to me for identification (AUK, vi., 1889, p. 306).

SUBFAMILY ANSERINÆ. GEESE.

GENUS CHEN BOIE.

CHEN HYPERBOREA (*Pall.*).

Lesser Snow Goose.

Adult: **General plumage, white;** primaries, black; and primary coverts, pale ash. The immature bird has the head, neck, and upper parts, mottled gray and white; the rump and tail are white; under parts, white.

Length, 23 to 30; wing, 14 to 17.50; bill, 2 to 2.35.

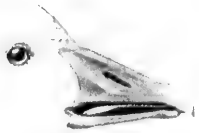
Chen hyperborea.

Habitat: "Pacific coast to the Mississippi Valley, breeding in Alaska, south in winter to Southern Illinois and Southern California, casually to New England, Northeastern Asia." (A. O. U.)

This species is rarely seen east of the Mississippi Valley; it is common on the Pacific coast. It breeds in Alaska; the eggs, according to Baird, Brewer & Ridgway (N. A. Bds.) are, "uniform, dirty chalky white and measure 3.40 x 2.20."

CHEN HYPERBOREA NIVALIS (*Forst.*).

Greater Snow Goose.



Adult: General plumage, white; primaries, black, and primary coverts, pale ash. The immature bird has the head, neck, and upper parts mottled gray and white; the rump and tail are white; under parts, white.

Similar to the preceding species but smaller. "Length, 30 to 38; wing, 14.50 to 17; bill, 1.95 to 2.30." (Ridgw.

Habitat: "North America, breeding far north-east of Mackenzie basin and migrating south in winter chiefly along the Atlantic coast, reaching Cuba." (A. O. U.)

The Greater Snow Goose does not seem to be very abundant anywhere. Its eggs, and even the exact location of its breeding grounds, are unknown.

Chen hyperborea nivalis.

CHEN CÆRULESCENS (*Linn.*).

Blue Goose.

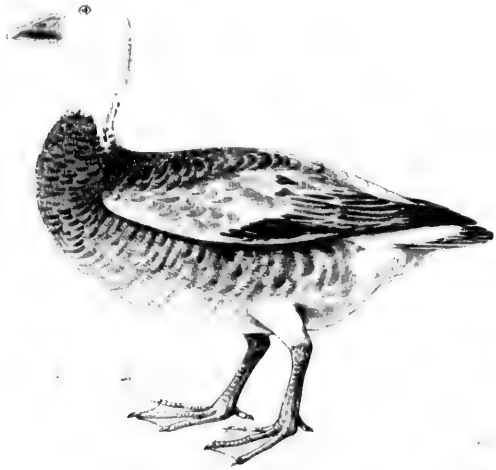
Chen cærulescens.

Adult: Head and neck, white or white tinged with orange brown, or white tinged with grayish; back and breast, dark slaty brown; the feathers margined with lighter brown; wing coverts and concealed portion of primaries and secondaries, slaty gray; exposed portion of primaries and secondaries, brownish black; greater portion of the shafts, white; lower back and rump, slaty gray; under parts, dull slaty gray, the feathers margined with pale brown or rusty brown; **axillars, hoary gray with grayish brown shafts.**

Wing, 16.25; tail, 5.75; tarsus, 2.75; bill (culmen), 2.37; bill (nostril to tip), 1.37; (angle of jaw to tip), 2.30.

Habitat: "Interior of North America, breeding on Eastern shores of Hudson's Bay and migrating south in winter through Mississippi Valley to Gulf coast; occasional on Atlantic coast." (A. O. U.)

The habits of this species are but little known, and for many years it was



Chen caerulescens.

supposed to be the young of the Snow Goose. The nest and eggs are unknown.

CHEN ROSSII (*Cassin.*).

Ross' Goose.

Chen rossii.

Adult: General plumage, pure white; exposed portion of primaries, black; axillars, white; basal portion of upper mandible wrinkled and with warty-like excrescences. Immature birds have the head, neck, and upper parts, pale gray; some of the feathers of the back and wing coverts, edged with white; rump and upper tail coverts, tail and under parts, white.

Wing, 14.50; tail, 5; tarsus, 2.25; culmen, 2.15; bill (nostril to tip), 2.85; bill (angle of mouth to tip), 1.70.

Habitat: "Arctic America in summer, Pacific coast to Southern California and east to Montana in winter." (A. O. U.) A western species not found in Eastern United States. The nest and eggs of this little goose are unknown.

GENUS ANSER BRISSON.

ANSER ALBIFRONS GAMBELI (*Hartl.*).

American White-fronted Goose.

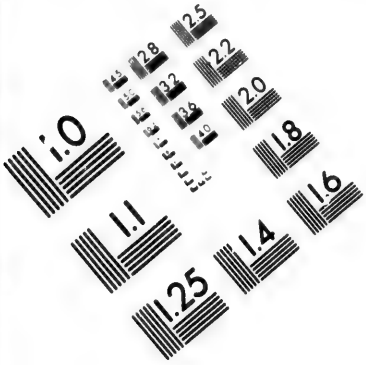
Adult: **Forehead and base of bill, white;** the rest of the head, brownish; neck, grayish brown, shading into dull white in front; under parts, whitish, the breast showing black markings; back, ashy gray, the feathers edged with brown on the upper part; shafts of quills, white; bill, pinkish or reddish or pale white; feet, yellow.

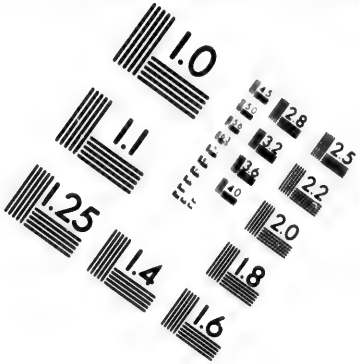
The immature bird is similar, but shows no white on the base of the bill, or black markings on the breast.

Length, 28; wing, 16; bill, 2; tarsus, 2.90.

This species occurs throughout North America, breeding far north, and ranging in winter south to Mexico and Cuba. It is common in many parts of the interior, but rather rare on the Atlantic coast. The nest is placed on the ground, and is composed of grass or weeds and lined with down. The eggs are five to seven, of pale greenish color, sometimes brownish.

The EUROPEAN WHITE-FRONTED GOOSE, *Anser albifrons* (Gmel.), occurs in Greenland, but has not been recorded elsewhere in North America. It is smaller than the American species.





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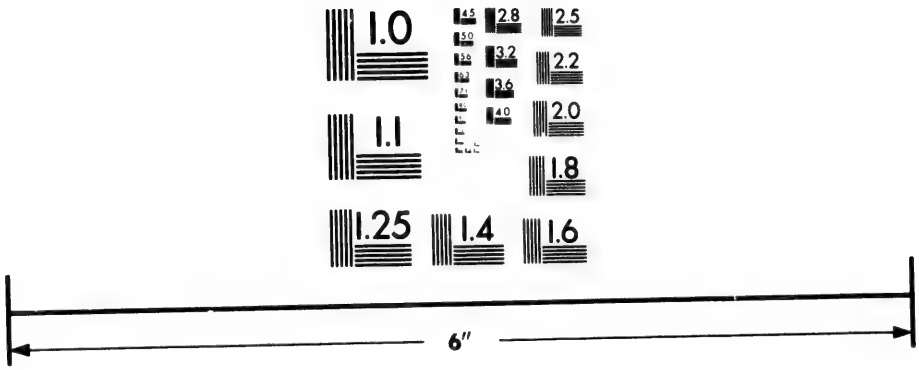

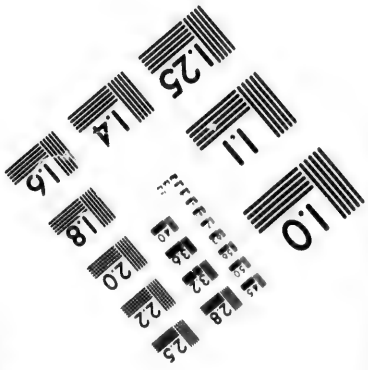

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GENUS BRANTA SCOPOLI.

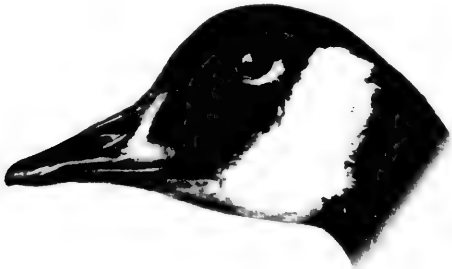
BRANTA CANADENSIS (*Linn.*).

Canada Goose.

Adult: Head and neck, black; a patch of white on the side of the head behind the eye extending to the chin; back and wings, grayish brown; breast and under parts, dull grayish white, becoming white on the belly; tail, black.

The immature bird is similar, but has the throat and cheeks sometimes mottled.

Length, 40; wing, 19; bill, 2.50; tarsus, 3.20.



Branta canadensis.

The Canada Goose occurs throughout temperate North America, breeding in Northern United States and the British Provinces. It ranges in winter as far south as Mexico and Jamaica, and a great number pass the winter on the Atlantic coast south of Virginia.

The nest, which is composed of sticks and grass lined with feathers, is built in the marshes and on borders of streams; it is claimed that sometimes the nest is placed in a tree. At one time it bred commonly on the Magdalen Islands. The eggs are four or five, usually brownish white.

BRANTA CANADENSIS HUTCHINSII (*Sav. & Rich.*).

Hutchins' Goose.

Similar to the Canada Goose, but smaller; rare east of the Mississippi Valley.

Habitat: "North America, breeding in the Arctic regions and migrating south in winter, chiefly through the Western United States and Mississippi Valley, Northeastern Asia." (A. O. U.)

BRANTA CANADENSIS OCCIDENTALIS (*Baird*).

White-cheeked Goose.

Special characters: "White patches on cheeks, usually separated by a black throat stripe or black mottling on the throat; white collar round lower neck, usually very distinct; wing, more than 16; culmen, more than 1.25." — *Ridgway.*

Pacific coast form ranging from Alaska, south in winter to California.

BRANTA CANADENSIS MINIMA.

Similar to the preceding species but smaller and the under parts darker.
Length, 23 to 25; wing, 13.60 to 14.50; culmen, 95 to 1.15; tarsus, 2.40 to 2.75.
Habitat: "Coast of Alaska chiefly about Norton Sound and the Lower Yukon, migrating southward into the Western United States, east to Wisconsin." (A. O. U.)

BRANTA LEUCOPSIS (*Bechst.*).

European Barnacle Goose.

The European Barnacle Goose, *Branta leucopsis*, is common in northern parts of the Old World. It occurs regularly in Greenland, and specimens have occasionally been taken on our coasts. The *white on the forehead and sides of the head and chin* will always distinguish it from American species.

BRANTA BERNICLA (*Linn.*).

Brant.

Branta bernicla.

Adult: Whole of the head, neck, and upper breast, black, except a patch on the **sides** of the neck, which is white and black; back, grayish brown; longer tail coverts, white; lower breast, grayish, shading into white on the belly.

Length, 25; wing, 13; tarsus, 2.25; bill, 1.30.

Ranges from Arctic Circle, where it breeds, southward in Eastern North America to Georgia, and occasionally to Florida. During migrations many are killed on the New England coast. Boxes are placed in sand bars in the vicinity of their feeding grounds; as the tide rises, the flocks gradually swim in nearer the bars and are often attracted within shooting distance by the decoys.

The eggs are described as creamy white in color, usually four in number. The nest is composed of grass and moss.

BRANTA NIGRICANS (*Lawr.*).

Black Brant.

Branta nigricans.

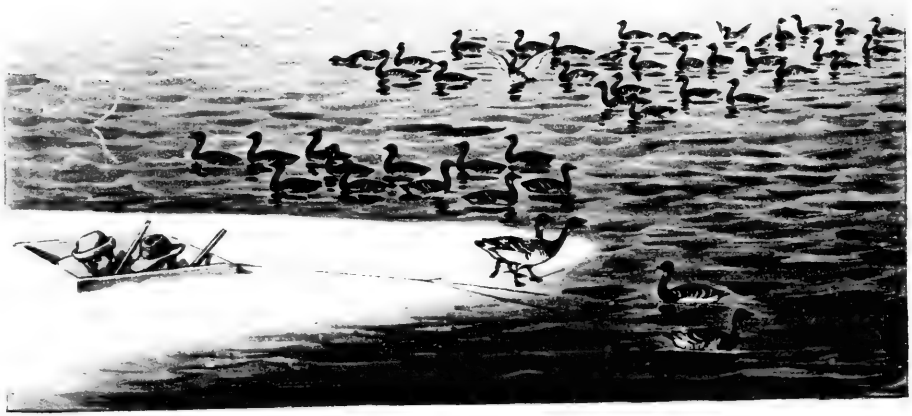
Adult: Differs from the common Brant in having the **front of the neck** as well as the sides **marked with white;** the breast and upper belly are darker.

Length, 26; wing, 13; bill, 1.30; tarsus, 2.30.

Habitat: "Arctic and Western North America, south in winter to Lower California; casual in the Atlantic States." (A. O. U.)

The Black Brant is merely a straggler on the Atlantic coast.* It is a western species and replaces the common Brant on the west coast where it is abundant. Mr. MacFarlane found it breeding near the Arctic Ocean. The nest is described as being a mere depression in the ground, but usually lined with down; the eggs are from five to seven and dull white in color.

* In the spring of 1883 I saw a bird of this species in the flesh which had been shot near Chatham, Mass. (Auk, 1884, p. 96.)



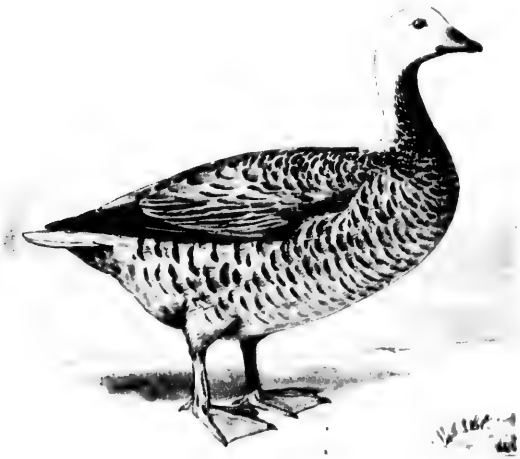
BRANT SHOOTING.

"Get Ready."

PHILACTE CANAGICA (*Sevast.*).

Emperor Goose.

Adult: Head and back of neck, white, sometimes tinged with rusty brown or orange brown; throat, brownish gray, dotted more or less with white; general plumage, slaty gray, the feathers tipped with ashy white and showing a subterminal band of brown, darker on the



Philacte canagica.

back than on the under parts; greater portion of outer tail feathers, white; inner feathers, hoary gray, edged with white; axillars, hoary gray, sometimes tipped with dull white.

Wing, 15.75; tarsus, 2.50; bill (culmen), 1.55; bill (nostril to tip), 1 inch; bill (angle of mouth to tip), 1.87; feet, flesh color; eye, dark brown.

Habitat: "Coast and islands of Alaska north of the peninsula, chiefly about Norton Sound and the valley of the Lower Yukon, Commander Islands, Kamchatka, casually southward to Humboldt Bay, California." (A. O. U.)

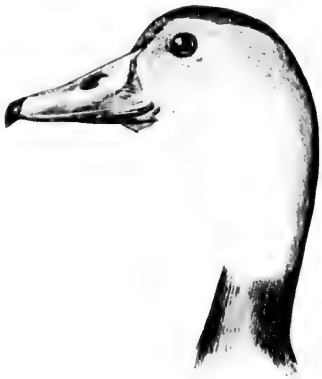
The Emperor Goose breeds in Alaska, where it is abundant in many localities. The nest is placed on the ground, the eggs are white, usually discolored with more or less brown.

DENDROCYGNA AUTUMNALIS (*Linn.*).

Black-bellied Tree-Duck.

Adult: Forehead, tawny brown, shading into black on the occiput, forming a black stripe which continues down the back of the neck. Sides of head and upper neck, brownish gray; throat, grayish white; lower neck, breast, and upper back, pale chestnut brown; some of the feathers washed with gray; under tail coverts, black and white; rest of under parts, **black;** under surface of wing, black; **axillars, smoky black;** greater portion of primaries, dull black; the outer webs of inner primaries and secondaries, partly white (all except the two outer feathers); bill, coral red or flesh color tinged with orange; above nail, blackish; legs and feet, pinkish white or pale flesh color. The sexes are alike.

Wing, 9.50; tarsus, 1.85; bill (culmen), 1.80; bill (angle of mouth to tip), 2.



Dendrocygna autumnalis.

The Black-bellied Tree-Duck ranges from Southern Texas and Southern California to Mexico, and Central America, being replaced in South America by a variety, *D. autumnalis discolor*. It does not occur in Eastern North America.

It breeds commonly in Mexico, the eggs being laid in a hollow tree, usually from twelve to sixteen in number and yellowish white, or greenish white. It is also said to breed in Trinidad, where it is claimed to be common.

DENDROCGYNA FULVA (*Gmel.*).

Fulvous Tree-duck.

Adult: Top of head, dark brown; a black stripe down the back of the neck; sides of head and neck, tawny brown; throat, brownish white; lower part of neck, finely mottled white, and smoky black; breast and entire under parts, buff brown, or fulvous brown; under tail coverts, buffy white; back, black, the feathers, tipped with rufous brown; wings, black; upper tail coverts, white; bill, bluish black; legs, bluish slate color in life; in dried skin, bill and feet, black. The sexes are similar.

Wing, 8.50; tarsus, 1.80; bill, 1.80 (culmen); angle of mouth, 2.10.

Dendrocygna fulva.

Geographical distribution: Southern border of the United States (Louisiana, Texas, Nevada, California), south to Mexico, reappearing in Southern Brazil and Argentine Republic. Casual in North Carolina and Missouri. (A. O. U.)

This is a fresh water species frequenting inland lakes and ponds. It breeds in California, Texas, and Mexico. The eggs are usually from ten to fifteen in number and are described as being white, or cream white.

SUBFAMILY CYGNINÆ. SWANS.

GENUS OLOR WAGLER.

OLOR COLUMBIANUS (*Ord.*).

Whistling Swan.

Adult: General plumage, white; bill and feet, black: a **small yellow spot on bare loral skin at the base of the bill in front of the eye,** which is not always present; *the distance from the front angle of the eye to the back edge of the nostril* **is more** *than the distance from the back edge of the nostril to the end of the bill;* this is one of the characters by which it may be always distinguished from the Trumpeter Swan: bill and feet, black.

Olor Columbianus.

The immature birds are usually pale, plumbeous gray, with a brownish wash on the head and upper neck: feet, pale yellowish, sometimes pale flesh color or grayish.

Length, 53; wing, 21.50; bill, 4; tarsus, 4.20.

Habitat: "The whole of North America, breeding far north, Commander Islands, Kamchatka, accidental in Scotland." (A. O. U.)

The Whistling Swan is common in winter on the Atlantic coast about the Carolinas and Virginia, and occasionally wanders as far south as Florida and the Gulf of Mexico. It breeds in the far north, the nest being composed of leaves and grass and placed on the ground. The eggs, which are from three to five, are dull white.

OLOR BUCCINATOR (*Rich*).

Trumpeter Swan.

Adult: General plumage, white; bare loral skin in front of eye, not yellow; bill and feet, black; *the distance from the front angle of the eye to the back edge of the nostril* **is equal or less** *than the distance from the back edge of the nostril to the end of the bill.*

Immature birds are ashy gray, often tinged with brownish on the head and neck; bill and feet, dull yellowish brown, tinged with olive.

Habitat: "Chiefly the interior of North America, from the Gulf to the fur countries, breeding from Iowa and the Dakotas northward, west to the Pacific coast; rare or casual on the Atlantic." (A. O. U.)

The eggs of the Trumpeter Swan are soiled white, and usually from three to six in number. The nest, which is placed on the ground, is composed of grass lined with down.

The Whooping Swan, *Olor cygnus* (*Linn.*), is occasionally found in Greenland, but has not been recorded elsewhere in North America.

It is described as having the base of the mandible and the entire bare loral skin yellow.

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